General comment: The permit appears to ignore the following standard:

COMAR 26.11.06.02.C. Visible Emission Standards.

- (1) In Areas I, II, V, and VI a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity.
- (2) In Areas III and IV a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is visible to human observers.

The above standard only exempts <u>fugitive</u> emissions from iron and steel installations. Control devices are not fugitive emissions – they are installations:

COMAR 26.11.01.01(18) "Fugitive emissions" means emissions which escape into the outdoor atmosphere through openings such as windows, doors, vents, roof monitors, poorly fitting closures, or poorly maintained equipment.

(19) "Installation" means any article, machine, equipment, or other contrivance, including, but not limited to, emission control equipment, processing equipment, manufacturing equipment, fuel-burning equipment, incinerators, or any equipment or construction, capable of generating, causing, or reducing emissions.

At a minimum, all control devices are subject to the no visible emissions standard because the facility is located in area III.

<u>General Comment</u>: The permit appears to streamline MACT testing and monitoring requirements with COMAR requirements without any explanation or analysis in the fact sheet. If the facility has been subject to any enforceable testing or monitoring prior to issuance of this TV permit, those requirements must continue in the TV permit.

<u>General comment</u>: According to 26.11.10.04, all control devices must meet the following, but these limits are not in the permit for every baghouse, scrubber, etc.

(4) Emissions from control equipment constructed pursuant to $\S B(1)$ and (2) of this regulation, shall meet the requirements of $\S A$ of this regulation and Regulation .03A(1) of this chapter.

SECTION IV PLANT SPECIFIC CONDITIONS

This section provides tables that include the emissions standards, emissions limitations, and work practices applicable to each emissions unit located at this facility. The Permittee shall comply with all applicable emissions standards, emissions limitations and work practices included herein.

The tables also include testing, monitoring, record keeping and reporting requirements specific to each emissions unit. In addition to the requirements included here in **Section IV**, the Permittee is also subject to the general testing, monitoring, record keeping and reporting requirements included in **Section III – Plant Wide Conditions** of this permit.

Unless otherwise provided in the specific requirements for an emissions unit, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required under this section to establish.

1	Emissions Unit Number(s) – Material Handling [6-0940]				
	BFOYMH: Ore Yard Material Handling.				
	BFBPMH: Bedding Plant Material Handling.				
	Applicable Standards/Limits:				
	Control of Particulate Matter COMAR 26 44 40 048(4) Particulate Matter Fugitive Emissions				
	COMAR 26.11.10.04B(1) – Particulate Matter Fugitive Emissions "A person may not cause or permit the discharge of fugitive emissions of particulate matter from				
	an iron and steel production installation unless reasonable control methods are employed to				
	minimize emissions. These methods include the use of hoods and control equipment to capture				
	emissions, other control techniques, and process restrictions."				
Testing Requirements:					
	None.				
Monitoring Requirements:					
	The Permittee shall prepare and maintain a plan that contains an explanation of the reasonable precautions that will be used to prevent particulate matter from becoming airborne. Once a week, the Permittee shall perform an inspection of the operations to verify that the reasonable precautions are being implemented. The Permittee shall reevaluate the effectiveness of the reasonable precaution plan and update the plan once per year. [Reference: COMAR 26.11.03.06C].				
	Permit must state the due date for completion of the plan in order to be enforceable. Also must state when the weekly inspections are to start.				
	Record Keeping Requirements:				
	The Permittee shall maintain the plan of reasonable precautions and keep records of dates and				

years. [Reference: COMAR 26.11.03.06C].

results of visual observations. These records shall be kept on site for a period of at least five

Reporting Requirements:

The Permittee shall submit the plan and records of visual observations to the Department upon request. [Reference: COMAR 26.11.03.06C].

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

2 Emissions Unit - Sinter Plant [6-0941]

BFSPCS: Cold Screening with Crusher/Hot/Cold/ screening Baghouse (BFSPCHSB).

BFSPC: Sinter Strand with Windbox Cyclones which includes the following:

- (1) **BFSPFC1S:** Sinter Strand with Scrubber No 1.
- (2) BFSPFC2S: Sinter Strand with Scrubber No 2.
- (3) **BFSPCO**: Cooler with Multicyclone (BFSPCOM).
- (4) **BFSPSSDE:** Fugitives Baghouse (BFSPCHSB).
- (5) **BFSPSSRM:** Sinter Strand Roof Monitor (plant building discharge end).

BFSPBLSB: Burnt Lime Silo with Baghouse.

BFSPWTLSB: Water Treatment Lime Silo with Baghouse.

BFSPHS: Hot Screening with Crusher/Hot/Cold/ Screening Baghouse (BFSPCHSB).

Applicable Standards/Limits:

A. Control of Visible Emissions

(1) **COMAR 26.11.10.03A(1) –** Visible Emissions

"A person may not cause or permit the discharge of emissions from any installation, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.10.03A(2) – Exceptions. "Section A(1) of this regulation does not apply to the following: (e) Confined emissions resulting from start-ups, process modifications or adjustments, or occasional cleaning of control equipment if: (i) The visible emissions are not greater than 40 percent opacity; and (ii) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

(2) **COMAR 26.11.10.03B(4) –** <u>Visible Emissions from Certain Installations</u>

"After complying with the requirements of Regulation .04B of this chapter, a person may not cause or permit the discharge of visible fugitive emissions into the outdoor atmosphere, other than water in an uncombined form, which is greater than the following specified visible emission standards: (4) **Sinter plant building** (including the discharge end): 10 percent opacity as averaged over any consecutive 6-minute period."

Additional requirements see MACT Requirements - Table 2a.

B. Control of Particulate Emissions

For Scrubber System, Cyclones and Baghouses

COMAR 26.11.10.04A - Particulate Matter Confined Emissions

"A person may not cause or permit the discharge of confined emissions of particulate matter in excess of 0.03 gr/scfd (68.7 mg/dscm) from any iron or steel production installation."

COMAR 26.11.10.04B(1) - Particulate Matter Fugitive Emissions

"A person may not cause or permit the discharge of fugitive emissions of particulate matter from an iron and steel production installation unless reasonable control methods are employed to minimize emissions. These methods include the use of hoods and control equipment to capture emissions, other control techniques, and process restrictions."

COMAR 26.11.10.04B(2)(f) - Fugitive Emissions Sinter Plant Building

"Reasonable Control Methods Required to Satisfy §B(1) of this Regulation. Reasonable control methods required to satisfy §B(1) of this regulation are listed below for the installation specified, grouped by major buildings or structures. No other control methods are required for those buildings, structures, or installations. The reasonable control methods are: (f) **Sinter plant building**: breaker box, windbox, hot and cold screens, entrance and exit from the sinter cooler, and material handling transfer points-----hooded and exhausted into control equipment."

Additional requirements see MACT Requirements - Table 2a.

C. Control of VOC Emissions

For Sinter Strand Scrubber System only

COMAR 26.11.10.06C(1) - Control of VOC Emissions from Sintering Plants

"A person who owns or operates a sintering plant subject to this regulation shall meet an emissions standard calculated on a daily average basis of 0.25 pound of VOC per ton of sinter produced."

Additional requirements see MACT Requirements - Table 2a.

D. Control of NO_x Emissions

COMAR 26.11.09.08J – Requirements for Industrial Furnaces and Other Miscellaneous Installations that Cause Emissions of NO_x. "A person who owns or operates any installation other than fuel-burning equipment that causes NO_x emissions shall:

- Maintain good operating practices as recommended by the equipment vendor to minimize emissions;
- 2) Prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation:
- 3) Maintain and make available to the Department, upon request, the written in-house operator training program;
- 4) Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year; and
- 5) Maintain operator training attendance records for each operator at the site for at least 2 years and make these records available to the Department upon request."

Testing Requirements:

- A. (1) For Sinter Strand with Scrubber No. 1 and No. 2 only
 - Beginning in calendar year 2006, the Permittee shall conduct annual particulate testing (EPA Method 5 or other testing method approved by the Department) to determine compliance with COMAR 26.11.10.04A. The Permittee shall maintain the hourly average pressure drop and scrubber water flow rate at levels no lower than those established at the most recent particulate test. What is meant by the most recent particulate test? Does this refer only to the testing that will be conducted after the MACT effective date or does it refer to testing that may have already been done? Shouldn't these parameters be monitored if they are required to be maintained?
 - (1) See MACT Requirement in Table 2a for testing requirements.
- B. **For Scrubber and Coolers with multicyclones**. See MACT Requirement in Table 2a for testing requirements.

There are two different standards - the state standards in COMAR and the MACT standards. If you are streamlining the testing requirements for both sets of rules, this must be expressly stated.

- C. See MACT Requirements in Table 2a for testing requirements.

 What about the testing required under the RACT requirements? If the two are being streamlined, the fact sheet must do that analysis it can't be presumed.
- D. None.

Monitoring Requirements:

(1) The Permittee shall visually inspect the exhaust gases from all control equipment [fugitive baghouse] (Does the latter mean just the fugitive baghouse? What about all the control equipment, including the cold screening baghouse, cooler, hot screening baghouse, windbox cyclones, scrubbers?) stack for visible emissions once a week for an 18-minute period and shall record the results of each observation. If no visible emissions are observed in six consecutive months for the exhaust stack of any emission unit, the Permittee may decrease the frequency of visual inspection from once weekly to once monthly for the exhaust stack of that emission unit. If visible emissions are observed during any monthly visual inspection, the Permittee must resume visible inspection of the exhaust stack of that emission unit once a week basis and maintain that schedule until no visible emissions are observed in six consecutive months. If no visible emissions are observed during the once a month visible inspection for the exhaust stack of any emission unit, the Permittee may decrease the frequency of visual inspection from monthly to semi-annually for the exhaust stack of that emission unit. If visible emissions are observed during any semi-annual visible inspection, the Permittee must resume visible inspection of the exhaust stack of that emission unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly inspections. [Reference: COMAR 26.11.03.06C].

(2) For Sinter Plant building

The Permittee shall conduct an EPA Method 9 observation once a month for 18-minutes to demonstrate compliance with the opacity limit in accordance with TM91-01 Method 1004H. [Reference: COMAR 26.11.10.07].

- B. See MACT Requirement in Table 2a for monitoring requirements. The COMAR requirements are separate from the MACT requirements and are independently subject to periodic monitoring. Therefore, the permit cannot presume that that the MACT monitoring provisions are adequate, especially given that these standards have existed for many years and the facility is currently required to comply. Waiting until 2006 to determine compliance with COMAR is not acceptable. In addition, the MACT standard does not cover all of the units at the sintering plant that are covered in COMAR 26.11.10.4B the permit must include monitoring for the hot and cold screens and associated baghouses. Also, if there is any monitoring that existed in the underlying state operating permit in effect before the title V permit, that monitoring must be included in this permit.
- C. The Permittee shall utilize the CEM system and other necessary data to demonstrate continuous compliance with §C(1) of this regulation. [Reference: COMAR 26.11.10.06C(3)(e)]. Continuous compliance shall be conducted in accordance with 40 CFR 60 and TM 90-01.

D. The Permittee shall maintain good operating practices as recommended by the equipment vendor to minimize NO_x emissions. [Reference: COMAR 26.11.09.08J(1)] The Permittee shall prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation. (Note: COMAR 26.11.09.08B(5)(a) states that "for the purpose of this regulation the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operations." [Reference: COMAR 26.11.09.08J(2)] The permit must state the deadline for facility to prepare and implement the in-house training program in order to be enforceable. If this plan already exists due to the underlying requirement, the permit should be revised to reflect that such that compliance begins (or continues) when the TV permit is issued.

Record Keeping Requirements:

NOTE: All records must be maintained for a period of 5 years. [Reference: COMAR 26.11.03.06C(5)(g)].

- A. (1) The Permittee shall maintain on site a log of the dates and results of visible emissions observations for a period of at least five years. [Reference: COMAR 26.11.03.06C].
 (2) The Permittee shall maintain on site a log of the dates and results of the Method 9 observations for a period of at least five years. [Reference: COMAR 26.11.03.06C].
- B. See MACT Requirement in Table 2a for record keeping requirements. See previous comments regarding COMAR vs MACT requirements.
- C. The Permittee shall maintain records of the following: (i) Daily average VOC emissions from the sinter plant stacks, and (ii) Daily sinter production. [Reference: COMAR 26.11.10.06C(3)(d) & COMAR 26.11.03.06C]
- D. The Permittee shall maintain the written in-house operator-training program and operator training attendance records for each operator at the site for at least 2 years. The Permittee shall make available the Department, upon request, the written in-house operator-training program and records of operator training attendance. [Reference: COMAR 26.11.09.08J(2)]

Reporting Requirements:

- A. (1)The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" The Permittee shall also make the records of visual emission inspections and significant maintenance performed, malfunctions, downtime and episodes of reduced efficiency of pollution control equipment, available to the Department upon request. [Reference: COMAR 26.11.03.06C].
 - (2) The Permittee shall make the results of the Method 9 observations available to the Department upon request. [Reference: COMAR 26.11.03.06C].
- B. See MACT Requirement in Table 2a for reporting requirements. See above
- C. The Permittee shall provide quarterly reports to the Department summarizing: (i) Daily average VOC emissions from the sinter plant stacks, and (ii) Daily sinter production. [Reference: COMAR 26.11.10.06C(3)(f)]
- D. None.

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

2a Emissions Unit Number(s) - Sinter Plant [6-0941] Cont'd

MACT Requirement

BFSPC: Sinter Strand with Windbox Cyclones. **BFSPCO:** Cooler with Multicyclone (BFSPCOM).

BFSPSSDE: Discharge End Fugitives with Baghouse (BFSPCHSB).

BFSPSSRM: Sinter Strand Roof Monitor. **BFSPFC1S:** Sinter Strand with Scrubber No 1. **BFSPFC2S:** Sinter Strand with Scrubber No 2.

BFSPDOL: Sinter Strand Duct Leaks.

40 CFR Part 63, Subpart FFFFF: National Emission Standards for Hazardous Air Pollutants: Integrated Iron and Steel Manufacturing

Applicability

§63.7781 – "Each owner or operator of an affected source at an integrated iron and steel manufacturing facility that is (or is part of) a major source of HAP emissions must comply with this final rule."

§63.7782 – Parts of the plant covered

- (a)This subpart applies to each new and existing affected source at an integrated iron and steel manufacturing facility. **OMIT**
- (b) The affected sources are each new or existing sinter plant, blast furnace, and basic oxygen process furnace (BOPF) shop at an integrated iron and steel manufacturing facility. **OMIT**
- (c) This subpart covers emissions from the sinter plant windbox exhaust, discharge end, and sinter cooler; the blast furnace casthouse; and the BOPF shop including each individual BOPF and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy). OMIT!!!
- (d) The sinter plant, blast furnace, or BOPF shop at your integrated iron and steel manufacturing facility exists if you commenced construction or reconstruction of the affected source before July 13, 2001.

§63.7783 – Compliance Dates

- (a) If you have an existing affected source, the Permittee must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to the Permittee no later than May 22, 2006.
- **(e)**You must meet the notification and schedule requirements in Sec. 63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

Applicable Standards/Limits:

Control of Visible Emissions (Opacity) and Particulate Matter

§63.7790(a)- Emission and Opacity Limits

- (a) The Permittee must meet each emission limit and opacity limit in Table 1, Subpart FFFFF, Part 63 that applies.
- 1. Each windbox exhaust stream at an existing sinter plant the Permittee must not cause to be discharged to the atmosphere any gases that contain particulate matter in excess of 0.4 lb/ton of product sinter
- 3. Each discharge end at an existing sinter plant
- a. You must not cause to be discharged to the atmosphere any gases that exit from one or more control devices that contain, on a flow-weighted basis, **particulate matter** in excess of

0.02 gr/dscf, and

bayou must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the building or structure housing the discharge end that exhibit **opacity** greater than 20 percent (6-minute average).

5. **Each sinter cooler stack at an existing sinter** - You must not cause to be discharged to the atmosphere any gases that contains **particulate mater** in excess of 0.03 gr/dscf.

Control of VOC emissions

§63.7790(d) For each sinter plant, you must either:

- (1) Maintain the 30-day rolling average oil content of the feedstock at or below 0.02 percent; or
- (2) Maintain the 30-day rolling average of volatile organic compound emissions from the **windbox** exhaust stream at or below 0.2 lb/ ton of sinter.

§63.7810 - General Compliance Requirements

- (a) You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in Sec. 63.2.
- **(b)**During the period between the compliance date specified for your affected source in Sec. 63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.
- (c) You must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in Sec. 63.6(e)(3).

Operational Standards

§63.7790(b) - Operating Limits

- **(b)**The Permittee must meet each operating limit for capture systems and control devices in paragraphs (b)(1) through (3) of this section that applies to you.
- (1) The Permittee must operate each capture system applied to emissions from a **sinter plant discharge end** or blast furnace casthouse or to secondary emissions from a BOPF at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;
- (2) For each venturi scrubber applied to meet any particulate emission limit in Table 1, Subpart FFFFF, Part 63, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.
- **(c)** An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must comply in accordance with requirements provided in §63.7790 (c) of this subpart.

§63.7800(a) – Operation and Maintenance Requirements

- (a) As required by Sec. 63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.
- **(b)** You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in Sec. 63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (5) of this section.

Testing Requirements:

§63.7820 - Initial Compliance Requirements

The Permittee must conduct a performance test to demonstrate initial compliance with each

emission and **opacity limit** in Table 1, Subpart FFFFF, Part 63. The Permittee must conduct the performance tests within 180 calendar days after the compliance date that is specified in §63.7783 for the affected source and report the results in the notification of compliance status.

§63.7821 - The Permittee must conduct subsequent performance test to demonstrate compliance with all applicable PM and opacity limits in Table 3, Subpart FFFFF, Part 63 but no less frequently than twice (at mid term and renewal) during each term of the Title V operating permit.

§63.7822 – §63.7826. All applicable performance tests and compliance demonstrations must be conducted in accordance with the test methods as provided in §63.7822, §63.7823, and §63.7824. The Permittee must comply with the requirements in §63.7825 and §63.7826 to demonstrate initial compliance with applicable emission limitations and with the operation and maintenance requirements that apply respectively.

Monitoring Requirements:

§63.7830 - Continuous Compliance Monitoring

- (a) For each capture system subject to an operating limit in Sec. 63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a Continuous Parameter Monitoring System (CPMS) according to the requirements in Sec. 63.7831(e) and the requirements in paragraphs (a)(1) through (3) of this section.
- (1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.
- (2) If you use a flow measurement device to monitor the operating limit parameter for a **sinter plant discharge end** or blast furnace casthouse, you must monitor the hourly average rate (e.g. the hourly average actual volumetric flow rate through each separately ducted hood, the average hourly total volumetric flow rate at the inlet to the control device) according to the requirements in §63.7832.
- (3) If you use a flow measurement device to monitor the operating limit parameter for a capture system applied to secondary emissions from a BOPF, you must monitor the average rate for each steel production cycle (e.g., the average actual volumetric flow rate through each separately ducted hood for each steel production cycle, the average total volumetric flow rate at the inlet to the control device for each steel production cycle) according to the requirements in §63.7832.
- **(b)** For each baghouse applied to meet any particulate emission limit in Table 1, Subpart FFFFF, Part 63, you must install, operate, and maintain a bag leak detection system according to Sec. 63.7831(f), monitor the relative change in particulate matter loadings according to the requirements in Sec. 63.7832, and conduct inspections at their specified frequencies according to the requirements in paragraphs (b)(1) through (8) of this section.
 - (1)Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.
 - (2)Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.
 - (3) Check the compressed air supply for pulsejet baghouses each day.
 - (4)Monitor cleaning cycles to ensure proper operation using an appropriate methodology.
 - (5)Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.
 - (6)Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not

have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

- (7)Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.
- (8)Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.
- (c) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in Sec. 63.7790(b)(2), you must install, operate, and maintain CPMS according to the requirements in Sec. 63.7831(g) and monitor the hourly average pressure drop and water flow rate according to the requirements in Sec. 63.7832.
- (e) For each sinter plant subject to the operating limit in Sec. 63.7790(d), the Permittee must either:
 - (1) Compute and record the 30-day rolling average of the oil content of the feedstock for each operating day using the procedures in Sec. 63.7824(e); or
 - (2) Compute and record the 30-day rolling average of volatile organic compound emissions (lbs/ton of sinter) for each operating day using the procedures in Sec. 63.7824(f).

§63.7833 - Compliance demonstration with applicable emission limitations

- (a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in Sec. 63.7790(a) by meeting the requirements in Table 3, Subpart FFFFF, Part 63.
- **(b)** You must demonstrate continuous compliance for each capture system subject to an operating limit in Sec. 63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.
- (1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and
- (2) Monitor the capture system according to the requirements in Sec 63.7830(a) and collect, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart.
- **(c)** For each baghouse applied to meet any particulate emission limit in Table 1, Subpart FFFFF, Part 63, you must demonstrate continuous compliance by completing the requirements in paragraphs (c)(1) and (2) of this section:
- (1) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm, the corrective actions(s) taken, and the date on which corrective action was completed.
- (2) Inspecting and maintaining each baghouse according to the requirements in Sec. 63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in Sec. 63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.
- (d) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in Sec. 63.7790(b)(2), you must demonstrate continuous compliance by completing the requirements of paragraphs (d)(1) through (3) of this section.
- (1) Maintaining the hourly average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;
- (2) Operating and maintaining each venturi scrubber CPMS according to Sec. 63.7831(g) and recording all information needed to document conformance with these requirements; and
- (3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to Sec. 63.7831(b) and recording all information needed to document conformance with these requirements.

- **(f)** For each new or **existing sinter plant** subject to the operating limit in Sec. 63.7790(d), you must demonstrate continuous compliance by either:
- (1) For the sinter plant feedstock oil content operating limit in Sec. 63.7790(d)(1),
- (i) Computing and recording the 30-day rolling average of the percent oil content for each operating day according to the performance test procedures in Sec. 63.7824(e);
- (ii) Recording the sampling date and time, oil content values, and sinter produced (tons/day); and
- (iii) Maintaining the 30-day rolling average oil content of the feedstock no higher than 0.02 percent.
- (2) For the volatile organic compound operating limit in Sec. 63.7790(d)(2),
- (i) Computing and recording the 30-day rolling average of volatile organic compound emissions for each operating day according to the performance test procedures in Sec. 63.7824(f);
- (ii) Recording the sampling date and time, sampling values, and sinter produced (tons/day); and
- (iii) Maintaining the 30-day rolling average of volatile organic compound emissions no higher than 0.2 lb/ton of sinter produced.

Record Keeping Requirements:

§63.7842(a) – The Permittee must keep the following records:

- (1)A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in Sec. 63.10(b)(2)(xiv).
- (2) The records in Sec. 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
- (3)Records of performance tests, performance evaluations, and opacity observations as required in Sec. 63.10(b)(2)(viii).
- (c) The Permittee must keep the records required in Sec. 63.6(h)(6) for visual observations.
- **(d)** The Permittee must keep the records required in Sec. Sec. 63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to you.

§63.7843 - Other Record keeping Requirements

- (a) Records must be in a form suitable and readily available for expeditious review, according to Sec. 63.10(b)(1).
- **(b)** As specified in Sec. 63.10(b)(1), the Permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) The Permittee must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to Sec. 63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Reporting Requirements:

§63.7840 - Notification Requirements

- (a) The Permittee must submit all of the notifications in Sec. Sec. 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.
- (**b**) As specified in Sec. 63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.
- (d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in Sec. 63.7(b)(1).
- **(e)** If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to

Sec. 63.9(h)(2)(ii).

- (1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.
- (2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to Sec. 63.10(d)(2).

§63.7841 - Reporting Requirements

- (a) <u>Compliance report due dates</u>. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.
- **(b)** Compliance report contents. Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.
- (c) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in Sec. 63.10(d)(5)(ii).
- (d) Part 70 monitoring report. If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

COMMENT: With respect to particulate matter, there is no way to tell from the permit exactly what applies to each unit in the inventory list at the beginning of the permit. The permit also does not address requirements that are in COMAR and MACT that don't appear in the inventory such as fugitive emissions from material handling, etc. As written, the permit requirements for the sinter plant are not practically enforceable.

PM Emissions – Which standards apply to which units?

	COMAR - Contained	COMAR- Uncontained	MACT
BFSPBLSB-S Burnt Lime Silo, with Baghouse			
(BFSPCS-F) (BFSPCHSB-S)Cold Screening with Baghouse		??	

[&]quot;A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

Cooler (BFSPCO-F) with Multicyclone (BFSPCOM-S)		??	X
Discharge End Fugitives (BFSPSSDE-F)		х	Х
Hot Screening (BFSPHS-F) with Baghouse (BFSPCHSB-S)		X	
Sinter Strand with Windbox Cyclones (BFSPC-F)		??	X
Sinter Strand with Scrubber No 1 (BFSPFC1S-S)	??		Х
Sinter Strand with Scrubber No. 2 (BFSPFC2S-S)	??		Х
Sinter Strand Roof Monitor (BFSPSSRM-F)	??		Х
Water Treatment Lime Silo with Baghouse (BFSPWTLSB-S)			
BFSPDOL Sinter Strand duct leaks			X
Material transfer points and entrance to sinter cooler (???)		X	

3 Emissions Unit Number(s) – L- Blast Furnace [6-0939]

L-Blast Furnace consisting of the following:

- (1) Casthouse roof monitor (**BFBFCH**) with baghouse (**BFBFFB**) for casting emissions from troughs (**BFBFFB**)
- (2) Dust Catcher. (BFBFFBDC) [No emissions]
- (3) Slag Pit. (BFBFSP) [Insignificant activity]
- (4) Emergency Bleeder (BFBFEB) [no emissions burns blast furnace gas]
- (5) B Street East Bleeder (BFBFBSEB) [no emissions burns blast furnace gas]
- (6) B Street West Bleeder (BFBFBSWB) [no emissions burns blast furnace gas]
- (7) Stoves (four) (BFBFS) Stack

BFBFHMCD: Hot Metal Car Dryout. [Insignificant activity – natural gas lance to dry out car]

Applicable Standards/Limits:

A. Control of Visible Emissions

For Casthouse Baghouse and Stoves Stack only BFBFFB and BFBFS?? COMAR 26.11.10.03A(1) – Visible Emissions

"A person may not cause or permit the discharge of emissions from any installation, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.10.03A(2) – Exceptions. "Section A(1) of this regulation does not apply to the following: (e) Confined emissions resulting from start-ups, process modifications or adjustments, or occasional cleaning of control equipment if: (i) The visible emissions are not greater than 40 percent opacity; and (ii) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

For Casthouse Building (roof monitor) Only BFBFCH? COMAR 26.11.10.03B(2) – Visible Emissions from Certain Installations

"After complying with the requirements of Regulation .04B of this chapter, a person may not cause or permit the discharge of visible fugitive emissions into the outdoor atmosphere, other than water in an uncombined form, which is greater than the following specified visible emission standards: (2) Blast furnaces constructed on or after January 1, 1977 (casthouse building (roof monitor?)): 5 percent opacity as averaged over any consecutive 6-minute period, except for 20 percent opacity as averaged over any consecutive 6-minute period during drilling, oxygen lancing, and plugging of the furnace tap holes."

Additional requirements see MACT Requirements for casthouse baghouse and roof monitor - Table 3a.

Control of Particulate Matter

For Baghouse and Stoves Stack only

COMAR 26.11.10.04A – Particulate Matter Confined Emissions

"A person may not cause or permit the discharge of confined emissions of particulate matter in excess of 0.03 gr/scfd (68.7 mg/dscm) from any iron or steel production installation".

For Casthouse Building (roof monitor) only

COMAR 26.11.10.04B(1) - Particulate Matter Fugitive Emissions

"A person may not cause or permit the discharge of fugitive emissions of particulate matter

from an iron and steel production installation unless reasonable control methods are employed to minimize emissions. These methods include the use of hoods and control equipment to capture emissions, other control techniques, and process restrictions."

B. COMAR 26.11.10.04B(2)(b) - Particulate Matter Fugitive Emissions

"Reasonable Control Methods Required to Satisfy §B(1) of this Regulation. Reasonable control methods required to satisfy §B(1) of this regulation are listed below for the installation specified, grouped by major buildings or structures. No other control methods are required for those buildings, structures, or installations. The reasonable control methods are: (b) **Blast furnaces** constructed on or after January 1, 1977 (**casthouse building**); iron notch, trough, and slag runners—hoods and control equipment."

Additional requirements see MACT Requirements - Table 3a.

B. C. Control of VOC Emissions

COMAR 26.11.10.06E – Control of VOC Emissions from Miscellaneous Production Installations. "A person who owns or operates a basic oxygen furnace or **blast furnace** shall: (1) Develop and maintain a good management practices plan for each installation; (2) Implement the good management practices plan to reduce VOC emissions; and (3) Make the plan available to the Department upon request."

Additional requirements see MACT Requirements - Table 3a.

C. D. Control of NO_x Emissions

For Stoves and Furnace

COMAR 26.11.09.08J – Requirements for Industrial Furnaces and Other Miscellaneous Installations that Cause Emissions of NO_x. "A person who owns or operates any installation other than fuel-burning equipment that causes NO_x emissions shall:

- Maintain good operating practices as recommended by the equipment vendor to minimize emissions:
- Prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation;
- 3) Maintain and make available to the Department, upon request, the written in-house operator training program;
- 4) Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year; and
- 5) Maintain operator training attendance records for each operator at the site for at least 2 years and make these records available to the Department upon request."

D. E. Operational Limit

- (a) Each compartment of the **Blast Furnace** baghouse must be equipped with a differential pressure gauge. [Reference: MDE PTC #03-6-0939 M, Part B(2) issued 10/1/1993]
- (b) A fabric-filter leak-detection system that must be equipped with an alarm, recorder, or equivalent method approved by MDE. [Reference: MDE PTC #03-6-0939 M, Part B(3) issued 10/1/1993]
- (c) The Permittee shall maintain on the premises sufficient quantity of replacement bags (544 bags minimum) to rebag one cell of the casthouse baghouse. [Reference: MDE PTC 03-6-0939M, Part C(3) issued 1/04/1999]
- (d) The Permittee shall read the pressure drop across each compartment at least once per shift and record each reading in a log. The log shall be available for inspection

by the Department upon request and shall be kept on site for a period of at least 2 years. [Reference: MDE PTC 03-6-0939M, Part D(5) issued 10/1/2003]

Testing Requirements:

- A. For Casthouse only: See MACT Requirements for testing in Table 3a.
- B. See MACT Requirements for testing in Table 3a.
- C. None.
- D. None.
- E. None.

Monitoring Requirements:

A. For Casthouse Baghouse and Stoves Stack only: The Permittee shall visually inspect the exhaust gases from baghouse and stoves stack, for visible emissions once a week for an 18-minute period and shall record the results of each observation. If no visible emissions are observed in six consecutive months for the exhaust stack of any emission unit, the Permittee may decrease the frequency of visual inspection from once weekly to once monthly for the exhaust stack of that emission unit. If visible emissions are observed during any monthly visual inspection, the Permittee must resume visible inspection of the exhaust stack of that emission unit once a week basis and maintain that schedule until no visible emissions are observed in six consecutive months. If no visible emissions are observed during the once a month visible inspection for the exhaust stack of any emission unit, the Permittee may decrease the frequency of visual inspection from monthly to semi-annually for the exhaust stack of that emission unit. If visible emissions are observed during any semi-annual visible inspection, the Permittee must resume visible inspection of the exhaust stack of that emission unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly inspections. . [Reference: COMAR 26.11.03.06C].

For Casthouse Building (roof Monitor) only: The Permittee shall perform a reference EPA Method 9 observation, once a month, for a 60-minute period in accordance with TM91-01 Method 1004G to demonstrate compliance with the opacity limit. **[Reference: COMAR 26.11.03.06C].** See MACT requirements for monitoring compliance demonstration

B. For Stoves stacks only - None.

For Casthouse Building only – See MACT requirements for monitoring compliance demonstration

There is no periodic monitoring for the PM limits in COMAR. If the MACT limits and the COMAR limits are to be streamlined, this must be explained in the fact sheet. If a previously issued state permit has had monitoring for PM for any of the blast furnace sources, that monitoring must be in the TV permit.

C. The Permittee shall prepare, implement and revise as necessary, good management practices plan for each Blast furnace installation to reduce VOC emissions. [Reference: COMAR 26.11.03.06C] The permit must state when this must be accomplished.

D. The Permittee shall maintain good operating practices as recommended by the equipment vendor to minimize NO_x emissions. [Reference: COMAR 26.11.09.08J(1)]. The Permittee shall prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation. (Note: COMAR 26.11.09.08B(5)(a) states that "for the purpose of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation." [Reference: COMAR 26.11.09.08J(2)]. The permit must state when this must be accomplished.

E. Operational Limit

- (a)The Permittee shall measure the pressure drop across each compartment at least once per shift to ensure that it remains within the appropriate range or within manufacturers' specification. [Reference: MDE PTC 03-6-0939M, Part D(5) issued 10/01/2003] With respect to both the NOx and operational limits how does an inspector know what the mfg's specs are? Is the facility required to obtain and keep them?
- (b) None.
- (c) The Permittee shall keep an inventory of the number of replacement bags available for use. The Permittee shall also inspect the inventory records at least once each week to ensure that the number of replacement bags available is sufficient (544 bags minimum). If during the inspection it is found that the there is insufficient number of replacement bags, the Permittee must take adequate steps to ensure that orders for new replacement bags are placed and they are procured within 24 to 48 hours. [Reference: MDE PTC 03-6-0939M, Part C(3),issued 1/04/1999]

Record Keeping Requirements:

NOTE: All records must be maintained for a period of 5 years [**Reference: COMAR 26.11.03.06C(5)(g)**].

- A. For Baghouse and Stoves Stack: The Permittee shall maintain on site a log of the dates and results of visible emissions observations for a period of at least five years. [Reference: COMAR 26.11.03.06C].
 - **For Casthouse Building (roof Monitor):** The Permittee shall also maintain records of the results EPA Method 9 observations. **[Reference: COMAR 26.11.03.06C]**.
- B. For Stoves stack None.
 - For Casthouse Building (roof monitor): See MACT requirements for record keeping requirement. See above comments on MACT vs COMAR
- C. The Permittee shall maintain written or printable electronic copies of all good management practices plan for each Blast Furnace installation to reduce VOC emissions. [Reference: COMAR 26.11.03.06C]
- D. The Permittee shall maintain the written in-house operator-training program and operator training attendance records for each operator at the site for at least 2 years. The Permittee shall make available to the Department, upon request, the written inhouse operator-training program and records of operator training attendance. [Reference: COMAR 26.11.09.08J(2)].

- E. Operational Limit
 - (a) The Permittee shall maintain records of daily pressure drop monitoring on site for at least five years and make available to the Department upon request. [Reference: MDE PTC 03-6-0939 M, Part D(5), issued 10/01/2003 & COMAR 26.11.03.06C].
 - (b) None.
 - (c) The Permittee shall maintain current inventory records onsite that indicates the number of replacement bags available for use. [Reference: COMAR 26.11.03.06C]

Reporting Requirements:

A. The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations." The Permittee shall also make the records of visual emission inspections available to the Department upon request [Reference: COMAR 26.11.03.06C].

For Casthouse Building (roof monitor): The Permittee shall report the results of EPA Method 9 observations to the Department in the quarterly report. [Reference: COMAR 26.11.03.06C & COMAR 26.11.01.10G]

B. For Stoves stack - None.

For Casthouse Building (roof Monitor) – See MACT requirement for reporting requirement. See above comments on MACT vs COMAR

- C. The Permittee shall make available to the Department upon request copies of good management practices plan for each Blast furnace installation for VOC emission reduction. [Reference: COMAR 26.11.03.06C]
- D. None.
- E. Operational Limit
 - (a)None.
 - (b)None.
 - (c)None.

3a Emissions Unit - L Blast Furnace [6-0939] Cont'd

MACT Requirements

BFBFFB: Blast Furnace with Baghouse for Casting Emissions (BFBFFB).

BFBFCH: Cast House

40 CFR Part 63, Subpart FFFFF: National Emission Standards for Hazardous Air Pollutants: Integrated Iron and Steel Manufacturing

Applicability

§63.7781 – "Each owner or operator of an affected source at an integrated iron and steel manufacturing facility that is (or is part of) a major source of HAP emissions must comply with this final rule."

§63.7782 – Parts of the plant covered

(a) This subpart applies to each new and existing affected source at an integrated iron and steel manufacturing facility.

[&]quot;A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

- **(b)**The affected sources are each new or existing sinter plant, **blast furnace**, and basic oxygen process furnace (BOPF) shop at an integrated iron and steel manufacturing facility.
- (c) This subpart covers emissions from the sinter plant windbox exhaust, discharge end, and sinter cooler; the **blast furnace casthouse**; and the BOPF shop including each individual BOPF and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy).
- (d) The sinter plant, **blast furnace**, or BOPF shop at your integrated iron and steel manufacturing facility exists if you commenced construction or reconstruction of the affected source before July 13, 2001.

§63.7783 - Compliance Dates

- (a) If you have an existing affected source, the Permittee must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to the Permittee no later than May 22, 2006.
- **(e)**You must meet the notification and schedule requirements in Sec. 63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

Applicable Standards/Limits:

Control of Visible Emission (Opacity) and Particulate Matter §63.7790(a) – Emission and Opacity Limits

(a) The Permittee must meet each emission limit and opacity limit in Table 1, Subpart FFFFF, Part 63 that applies.

For:

7. Each casthouse at an existing blast furnace

- a. You must not cause to be discharged to the atmosphere any gases that exit from a control devices that contain **particulate matter** in excess of 0.01 gr/dscf; and
- b. You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the **casthouse** or structure housing the blast furnace that exhibit **opacity** greater than 20 percent (6-minute average).

§63.7810 - General Compliance Requirements

- (a) You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in Sec. 63.2.
- (b) During the period between the compliance date specified for your affected source in Sec. 63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.
- (c) You must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in Sec. 63.6(e)(3).

Operational Standards

§63.7790(b) - Operating Limits

- **(b)** You must meet each operating limit for capture systems and control devices in paragraphs (b)(1) through (3) of this section that applies to you.
- (1) You must operate each capture system applied to emissions from a sinter plant discharge end or **blast furnace casthouse** or to secondary emissions from a BOPF at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;
- **(c)** An owner or operator who uses an air pollution control device other than a **baghouse**, venturi scrubber, or electrostatic precipitator must comply in accordance with requirements provided in §63.7790 (c) of this subpart.

§63.7800(a) – Operation and Maintenance Requirements

- (a) As required by Sec. 63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.
- **(b)** You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in Sec. 63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (5) of this section.

Testing Requirements:

§63.7820 - Initial Compliance Requirements

The Permittee must conduct a performance test to demonstrate initial compliance with each emission and **opacity limit** in Table 1, Subpart FFFF, Part 63 that applies. The Permittee must conduct the performance tests within 180 calendar days after the compliance date that is specified in §63.7783 for the affected source and report the results in the notification of compliance status.

- §63.7821 The Permittee must conduct subsequent performance test to demonstrate compliance with all applicable PM and opacity limits in Table 3, Subpart FFFFF, Part 63, but no less frequently than twice (at mid term and renewal) during each term of the Title V operating permit.
- **§63.7822 §63.7826**. All applicable performance tests and compliance demonstrations must be conducted in accordance with the test methods as provided in §63.7822, §63.7823, and §63.7824. The Permittee must comply with the requirements in §63.7825 and §63.7826 to demonstrate initial compliance with applicable emission limitations and with the operation and maintenance requirements that apply respectively.

Monitoring Requirements:

§63.7830 - Continuous Compliance Monitoring

- (a) For each capture system subject to an operating limit in Sec. 63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a Continuous Parameter Monitoring System (CPMS) according to the requirements in Sec. 63.7831(e) and the requirements in paragraphs (a)(1) through (3) of this section.
- (1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.
- (2) If you use a flow measurement device to monitor the operating limit parameter for a sinter plant discharge end or **blast furnace casthouse**, you must monitor the hourly average rate (e.g. the hourly average actual volumetric flow rate through each separately ducted hood, the average hourly total volumetric flow rate at the inlet to the control device) according to the requirements in §63.7832.
- (3) If you use a flow measurement device to monitor the operating limit parameter for a capture system applied to secondary emissions from a BOPF, you must monitor the average rate for each steel production cycle (e.g., the average actual volumetric flow rate through each separately ducted hood for each steel production cycle, the average total volumetric flow rate at the inlet to the control device for each steel production cycle) according to the requirements

in §63.7832.

For Casthouse Baghouse

- **(b)** For each baghouse applied to meet any particulate emission limit in Table 1, Subpart FFFFF, Part 63, you must install, operate, and maintain a bag leak detection system according to Sec. 63.7831(f), monitor the relative change in particulate matter loadings according to the requirements in Sec. 63.7832, and conduct inspections at their specified frequencies according to the requirements in paragraphs (b)(1) through (8) of this section.
- (1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.
- (2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.
- (3) Check the compressed air supply for pulsejet baghouses each day.
- (4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.
- (5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.
- (6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.
- (7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.
- (8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

§63.7833 - Compliance demonstration with applicable emission limitations

- (a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in Sec. 63.7790(a) by meeting the requirements in Table 3, Subpart FFFFF, Part 63.
- **(b)** You must demonstrate continuous compliance for each capture system subject to an operating limit in Sec. 63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.
- (1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and
- (2) Monitor the capture system according to the requirements in Sec 63.7830(a) and collect, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart.
- (c) For each baghouse applied to meet any particulate emission limit in Table 1, Subpart FFFFF, Part 63, you must demonstrate continuous compliance by completing the requirements in paragraphs (c)(1) and (2) of this section.
- (1) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm, the corrective actions(s) taken, and the date on which corrective action was completed.
- (2) Inspecting and maintaining each baghouse according to the requirements in Sec. 63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in Sec. 63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

Record Keeping Requirements:

§63.7840 – Records to be Maintained

(a) You must keep the following records:

- (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in Sec. 63.10(b)(2)(xiv).
- (2) The records in Sec. 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
- (3) Records of performance tests, performance evaluations, and opacity observations as required in Sec. 63.10(b)(2)(viii)
- (c) You must keep the records required in Sec. 63.6(h)(6) for visual observations.
- **(d)** You must keep the records required in Sec. Sec. 63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that applies to you.

§63.7843 - Other Record keeping Requirements

- (a) Your records must be in a form suitable and readily available for expeditious review, according to Sec. 63.10(b)(1).
- **(b)** As specified in Sec. 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to Sec. 63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Reporting Requirements:

§63.7840 - Notification Requirements

- (a) You must submit all of the notifications in Sec. Sec. 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.
- **(b)** As specified in Sec. 63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.
- (d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in Sec. 63.7(b)(1).
- (e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to Sec. 63.9(h)(2)(ii).
- (1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.
- (2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to Sec. 63.10(d)(2).

§63.7841 - Reporting Requirements

- (a) <u>Compliance report due dates</u>. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.
- (b) Compliance report contents. Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.
- **(c)** Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in Sec. 63.10(d)(5)(ii).

(d) Part 70 monitoring report. If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

4 Emissions Unit - Beaching [6-2582] This operation Is not addressed in the fact sheet

BLFLBLFHMDPF: No. 3 Mold Yard. Emissions are contained in the building. Carbon dioxide is injected as the metal is being poured.

Applicable Standards/Limits:

A. Control of Particulate Matter

COMAR 26.11.10.04B – Particulate Matter Fugitive Emissions

- "(1) A person may not cause or permit the discharge of fugitive emissions of particulate matter from an iron and steel production installation unless reasonable control methods are employed to minimize emissions. These methods include the use of hoods and control equipment to capture emissions, other control techniques, and process restrictions."
- "(3) All required reasonable control methods shall be designed to represent good engineering practice and constructed in accordance with the Department's permit to construct approval. The reasonable control methods employed shall be operated and maintained to comply with the visible emission standards set forth in Regulation .03A and B of this chapter and in accordance with any conditions imposed in the Department's permit to operate for that installation."

B. **Operational Limit**

- When beaching hot metal in the #3 Mold Yard building, injecting carbon dioxide into a hooded containment structure located in the building shall control emissions. [Reference: MDE PTC 03-6-2582M, Part(C)(2) issued 5/2/2000] The Permittee shall not beach hot metal in the #3 Mold Yard building without the carbon dioxide suppression system in operation. [Reference: MDE PTC 03-6-2582M, Part(C)(3), issued 5/2/2000].
- 2) The Permittee shall maintain the physical integrity of the #3 Mold Yard building to ensure that emissions associated with the beaching of hot metal shall be contained in the building. In the event of damage to the building and until such time as the damage is repaired, the Permittee shall take all reasonable precautions to minimize the amount of hot metal beached including full utilization of available pigging operation and the throttling back on the Blast Furnace operation. [Reference: MDE PTC 03-6-2582M, Part (C)(5), issued 5/2/20001
- 3) The Permittee cannot beach more than 1,000 tons per day and more than 80,000 tons per year of hot metal in the #3 Mold Yard building during normal operations. This condition does not apply during startup and shutdown of the Blast Furnace for a major outage or for

any emergency event that has compelled the Division to idle the Blast Furnace. [Reference: MDE PTC 03-6-2582M, Part(C)(4), issued 5/2/2000]

Testing Requirements:

- A. None.
- B. Operational Limit
- 1) thru 4) None.

Monitoring Requirements:

- A. The Permittee shall prepare and maintain a plan that contains an explanation of the reasonable precautions that will be used to prevent particulate matter from becoming airborne. Once a week, the Permittee shall perform an inspection of the operations to verify that the reasonable precautions are being implemented. The Permittee shall reevaluate the effectiveness of the reasonable precautions plan once per year. [Reference: COMAR 26.11.03.06C].
- B. Operational Limit
- (1) None.
- (2) The Permittee shall make weekly inspections of the #3 Mold Yard building to check for leaks. All leaks shall be repaired within one week of discovery. [Reference MDE PTC 03-6-2582M, Part(C)(7), issued 5/2/2000]
- (3) The Permittee shall inspect the #3 Mold Yard building for accumulation of kish after each 5,000 tons of hot metal beached. If accumulation of kish is found, or at the request of the Department, the building shall be vacuum cleaned within 48 hours of the inspection or the request. [Reference: MDE PTC 03-6-2582M, Part(C)(6), issued 5/2/2000]

Record Keeping Requirements:

- A. The Permittee shall maintain the plan of reasonable precautions and keep records of dates and results of visual observations. These records shall be kept on site for a period of at least five years. [Reference: COMAR 26.11.03.06C].
- B. Operational Limit
- (1) None.
- (2) The Permittee shall keep records of building maintenance and damage repair, cleaning, building inspections, and malfunctions (including explosions) and make these records available to the Department upon request. [Reference: MDE PTC 03-6-2582M, Part(D)(2), issued 5/2/2000].
 - The Permittee shall maintain a log of each kish inspection and record corrective action taken, if any, to reduce kish accumulations. Records of kish inspections and corrective actions must be maintained onsite for 5 years and must be made available to the Department upon request. [Reference: MDE PTC 03-6-2582M, Part(C)(6), issued 5/2/2000].
- (3) The Permittee shall keep daily records of tons of hot metal beached at the #3 Mold Yard building. [Reference MDE PTC 03-6-2582M, Part(D)(1), issued 5/2/2000]

Reporting Requirements:

A. The Permittee shall submit the plan and records of observations to the Department upon

request. [Reference: COMAR 26.11.03.06C].

B. Operational Limit.

- (1) The Permittee shall report any deviations in the normal operation of the carbon dioxide suppression system to the Department. This includes shutdowns, malfunctions, repairs, or other changes to normal routine operations that would likely cause an increase in emissions from the No. 3 Mold Yard. [Reference: COMAR 26.11.03.06C]
- (2) None.
- (3) The Permittee shall report the tons of hot metal beached to the Department in annual the Emissions Certification Report. [Reference: MDE PTC 03-6-2582M, Part(D)(1), issued 5/2/2000] The Permittee must also report to the Department the amounts of hot metal beached that exceeds the normal operational permitted levels as provided in MDE PTC 03-6-2582M, Part(C)(4)

5 Emissions Unit Number(s) – Basic Oxygen Furnace (BOF) Shop [6-0943]

SMBOFRP: Hot Metal Reladling Pit with Baghouse (SMBOFRPB)

SMBOFERP: Hot Metal Emergency Reladling Pit equipped with natural gas suppression control.

SMBOFDSB – Desulfurization station with baghouse.

SMBOFDSSB – Reagent silo with baghouse [9-0950].

SMBOBOF: BOF Charging, Refining, Tapping, Slag Handling with BOF scrubbers

(SMBOFBOFS) and BOF Roof Monitor (fugitive emissions) (SMBOBBOF)

SMBOFLM: BOF Ladle Metallurgy includes baghouse. **SMBOFMB:** BOF Raw Material Handling with Baghouse

CMBOFTUB BOE Base Material Hamilia with Basilesses (Taxa

SMBOFTHB: BOF Raw Material Handling with Baghouse (Track hopper)

SMBOFCD: Two (2) Cover Drying Stations [insignificant activity]. **SMBOFLD:** Six (6) Ladle Drying Stations [insignificant activity].

SMBOFSSB: Slag Skimming Station with Baghouse.

Applicable Standards/Limits:

A. Control of Visible Emissions

(1) For Slag Skimming Station with Baghouse only:

§60.142a(a) - Except as provided under paragraph (b) and (c) of this section, on and after the date on which the performance test under 60.8 is required to be completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any secondary emissions that: (3) Exit from a control device used solely for the collection of secondary emissions from a top-blown BOPF or from hot metal transfer or skimming for a top-blown or a bottom-blown BOPF and exhibit more than 5 percent opacity." 60.142a(a)(1) also applies unless the fact sheet can explain why it doesn't. Does the skimming station baghouse discharge into the BOF building? If yes, then emissions from roof monitor will be subject to the NSPS.

(2) **COMAR 26.11.10.03A(1)** – Visible Emissions

"A person may not cause or permit the discharge of emissions from any installation, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.10.03A(2) – <u>Exceptions</u>. "Section A(1) of this regulation does not apply to the following: (e) Confined emissions resulting from start-ups, process modifications or adjustments, or occasional cleaning of control equipment if: (i) The visible emissions are not

[&]quot;A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

greater than 40 percent opacity; and (ii) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

(3) **COMAR 26.11.10.03B(5)** - <u>Visible Emissions from Certain Installations</u>

"After complying with the requirements of Regulation .04B of this chapter, a person may not cause or permit the discharge of visible fugitive emissions into the outdoor atmosphere, other than water in an uncombined form, which is greater than the following specified visible emission standards: (5) **Basic oxygen furnace shop building**: 15 percent opacity from the basic oxygen furnace shop roof monitor based on a 3-observation rolling arithmetic average of the opacity records recorded on each of 3 calendar days of observation."

COMAR 26.11.10.03(C) - 15 Percent Standard.

- 1) "The provision described in §B(5) of this regulation is referred to as the 15 percent standard. The first exceedance of the 15 percent standard during each calendar year, from January 1 through December 31, does not constitute a violation of the 15 percent standard. The second exceedance and all subsequent exceedances of the 15 percent standard during the calendar year are prohibited."
- 2) "Any source subject to §B(5) of this regulation shall, at a minimum, schedule one observation on each of the three different calendar days per calendar week, and perform the observations on the days scheduled, unless weather or other conditions on one or more of those days prevent observations to be made in accordance with Method 9."
- 3) "If weather or other conditions prevent Method 9 observation from being made, a person shall perform the missing observation or observations during that week or in the following 2 calendar weeks in addition to the minimum three observations required for each calendar week, unless prevented by weather or other conditions."

Additional Opacity requirements see MACT requirements - Table 5a.

B. Control of Particulate Matter

For Slag Skimming Station with Baghouse only - NSPS

§60.142a(a) - Standards for Particulate Matter. "Except as provided under paragraph (b) and (c) of this section, on and after the date on which the performance test under 60.8 is required to be completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any secondary emissions that: (2) Exit from a control device used solely for the collection of secondary emissions from a top-blown BOPF or from hot metal transfer or skimming for a top-blown or a bottom-blown BOPF and contain particulate matter in excess of 23 mg/dscm (0.010 gr/dscf)."

For Scrubber system, baghouses (reladling, slag skimming & desulfurization)

COMAR 26.11.10.04A - Particulate Matter

"A person may not cause or permit the discharge of confined emissions of particulate matter in excess of 0.03 gr/scfd (68.7 mg/dscm) from any iron or steel production installation".

COMAR 26.11.10.04B(1) - Particulate Matter Fugitive Emissions

"A person may not cause or permit the discharge of fugitive emissions of particulate matter from an iron and steel production installation unless reasonable control methods are employed to minimize emissions. These methods include the use of hoods and control equipment to capture emissions, other control techniques, and process restrictions" **COMAR 26.11.10.04B(2)** - Reasonable Control Methods Required to Satisfy

§B(1) of this Regulation.

"Reasonable control methods required to satisfy §B(1) of this regulation are listed below for the installation specified, grouped by major buildings or structures. No other control methods are required for those buildings, structures, or installations. The reasonable control methods are: (c) **Basic oxygen furnace shop building:**

- (i) <u>Hot metal reladling</u> hoods and control equipment on the normal hot metal pit and flame suppression on the emergency pit,
- (ii) Oxygen lance hole suppression maintained on all furnace oxygen lance openings;
- (iii) <u>Furnace charging, refining, and tapping</u> use of a primary hood and control equipment with good operating practices and regular maintenance of all system components and ductwork."

Additional particulate matter requirements see MACT requirements - Table 5a.

C. Control of VOC Emissions

COMAR 26.11.10.06E(1) – Control of VOC Emissions from Miscellaneous Production Installations.

"A person who owns or operates a basic oxygen furnace or a blast furnace shall:

- (1) Develop and maintain a good management practices plan for each installation;
- (2) By January 1, 2002, implement the good management practices plan to reduce VOC emissions; and
- (3) Make the plan available to the Department upon request."

D. Control of NO_x Emissions

For all sources of NO_x in the BOF shop only

COMAR 26.11.09.08J – Requirements for Industrial Furnaces and Other Miscellaneous Installations that Cause Emissions of NO_x. "A person who owns or operates any installation other than fuel-burning equipment that causes NO_x emissions shall:

- Maintain good operating practices as recommended by the equipment vendor to minimize emissions:
- Prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation;
- 3) Maintain and make available to the Department, upon request, the written in-house operator training program;
- 4) Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year; and
- 5) Maintain operator training attendance records for each operator at the site for at least 2 years and make these records available to the Department upon request."

Testing Requirements:

A. (1) See MACT Requirements for testing in Table 5a. **Does this refer to the NSPS?**

(2) For BOF Scrubbers only

Beginning in calendar year 2006, the Permittee shall conduct annual particulate testing (EPA Method 5 or other testing method approved by the Department) to determine compliance with COMAR 26.11.10.04A. The Permittee shall maintain the hourly average pressure drop and scrubber water flow rate at levels no lower than those established at the most recent particulate test.

(3) See MACT Requirements for testing in Table 5a. Same comments re: MACT vs COMAR

B. For Slag Skimming Station only: The Permittee shall follow the test methods and procedures as prescribed in regulation. [Reference: §60.144a Test methods and procedures]. When? Hasn't this already been done? See MACT Requirements for testing in Table 5a. ditto

For Scrubber system: See MACT Requirements in Table 5a for additional testing requirements. **ditto**

- C. None
- D. None.

Monitoring Requirements:

- A. (1) For Skimming Station only: The Permittee shall perform once a week 6-minute visual observation of the baghouses exhaust. The visual observation must be conducted while the baghouses are in operation. If visible emissions are observed during any observation, the Permittee must conduct an 18-minute test of opacity in accordance with EPA Method 9. The EPA Method 9 test must begin within 24-hour of any observation of visible emissions. [Reference: COMAR 26.11.10.03]
 - (2) For Baghouses (Reladling & desulfurization) and Scrubbers. The Permittee shall perform once a week 6-minute visual observation of the baghouses exhaust. The visual observation must be conducted while the baghouses are in operation. If visible emissions are observed during any observation, the Permittee must conduct an 18-minute test of opacity in accordance with EPA Method 9. The EPA Method 9 test must begin within 24-hour of any observation of visible emissions. [Reference: COMAR 26.11.10.03]
 - (3) The Permittee shall hire an independent contractor to perform visible emissions observations on the **BOF roof monitor**.

Each observation shall be performed for one hour utilizing EPA Reference Method 9 (Visual Determination of Opacity of Emissions from Stationary Sources – 40 CFR Ch. 1, Part 60, App. A), except for the sentence within paragraph 2.4 of Method 9 setting the minimum number of 24 observations to be recorded and the data reduction provisions in paragraph 2.5 of Method 9. The "opacity record" of each observation is determined as the highest average of any 6 consecutive minutes of readings. Prior to making an "opacity record" calculation, the three highest minutes from the 60-minute observation may be removed in 1, 2, or 3-minute groups. After removing these minutes, the remaining minutes of readings are treated as if they were consecutive when calculating an "opacity record."

For each calendar day on which more than one valid observation is performed, and therefore more than one "opacity record" is established, the highest "opacity record" of that calendar day shall be the only one utilized in a determination of compliance. The Permittee shall, at a minimum schedule one observation on each of three (3) different calendar days per calendar week, and shall perform the observations on the days scheduled, unless weather or other conditions on one or more of those days prevent observations in compliance with Method 9. In that event, the Permittee shall perform the missing observation(s) during that week or in the following two (2) calendar weeks in addition to the minimum 3 observations required for each calendar week, unless weather or other conditions prevent such observation(s) in compliance with EPA Method 9. Should MDE or EPA perform an observation or observations, each such

observation shall be deemed to be in lieu of an observation required to be performed by the Permittee, on a one-for-one basis. [Reference: COMAR 26.11.03.06C] Just for clarification – is this monitoring for the NSPS? Is this the monitoring for 60.142a(a)(1)? If so, this should be listed as one of the applicable standards.

B. For Slag Skimming Station only: The Permittee shall install, calibrate, operate, and maintain a monitoring device that continually measures and records for each steel production cycle the various rates or levels of exhaust ventilation at each phase of the cycle through each duct of the secondary emission capture system. The monitoring device or devices are to be placed at locations near each capture point of the secondary emission capture system to monitor the exhaust ventilation rates or levels adequately, or in alternative locations approved in advance by the Department. [Reference §60.143a(a)-Monitoring Requirements] Hasn't this already been done?

For Scrubbers and baghouses – See MACT requirements in Table 5a for monitoring ditto

- C. The Permittee shall prepare, implement and revise as necessary, good management practices plan for each Basic Oxygen Furnace installation to reduce VOC emissions. [Reference: COMAR 26.11.03.06C] By when (hasn't this already been done?)
- D. The Permittee shall maintain good operating practices as recommended by the equipment vendor to minimize NO_x emission. [Reference: COMAR 26.11.09.08J(1)]. The Permittee shall prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation. (Note: COMAR 26.11.09.08B(5)(a) states that "for the purpose of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operations. [Reference: COMAR 26.11.09.08J(2)] By when....etc

Record Keeping Requirements:

- A. (1) & (2) The Permittee shall maintain records of the visual observations or Method 9 observations conducted on the baghouse for at least five years. [Reference: COMAR 26.11.03.06C]
 - (3)The Permittee shall maintain the required opacity records required in §B(5) of COMAR 26.11.10.03B(5) including a summary of each calendar day observation's "opacity record" and the 3-observation rolling arithmetic average of the "opacity record". **[Reference: COMAR 26.11.03.06C1.**
- B. For Slag Skimming (NSPS) only See MACT requirements in Table 5a for record keeping requirements. ditto
 - **For Scrubbers and baghouses** See MACT requirements in Table 5a for record keeping requirements. **ditto**
- C. The Permittee shall maintain written or printable electronic copies of all good management practices plan for each Basic Oxygen Furnace installation to reduce VOC emissions. [Reference: COMAR 26.11.03.06C]
- D. The Permittee shall maintain the written in-house operator-training program and operator training attendance records for each operator at the site for at least 2 years. The Permittee shall make available to the Department, upon request, the written in-house operator-

training program and records of the operator training attendance.

[Reference: COMAR 26.11.09.08J(2)]

Reporting Requirements:

- A. (1) & (2) The Permittee shall report the results of the visual observation or Method 9 to the Department no later than 30th day of the month following each quarter. [Reference: COMAR 26.11.03.06C]
 - (3) The Permittee shall submit to the Department, no later than the thirtieth (30th) of the month following each calendar quarter, a report which contains the following records:
 - (a) records required in Part C3(c);
 - (b) records required in Part C6(d) including a summary of each calendar day observation's "opacity record" and the 3-observation rolling arithmetic average of the "opacity record."

[Reference: COMAR 26.11.03.06C]

- B. For Slag Skimming (NSPS) only None
 - For Scrubbers and Baghouses See MACT requirements in Table 5a for reporting requirements.
- C. The Permittee shall make available to the Department upon request copies of good management practices plan for each Basic Oxygen furnace installation for VOC emission reduction. [Reference: COMAR 26.11.03.06C]
- D. None.

5a Emissions Unit - BOF Shop [6-0943] Cont'd

MACT Requirements

SMBOFRP: Hot Metal Relading Pit with Baghouse (SMBOFRPB).

SMBOBOF: BOF Charging, Refining, Tapping, Slag Handling with BOF scrubbers

(SMBOFBOFS) and BOF Roof Monitor (SMBOFBOF). SMBOFLM: BOF Ladle Metallurgy includes baghouse.

SMBOFSSB: Slag Skimming Station with Baghouse.

SMBOFDSB – Desulfurization station units with baghouse.

40 CFR Part 63, Subpart FFFFF: National Emission Standards for Hazardous Air Pollutants: Integrated Iron and Steel Manufacturing

Applicability

§63.7781 – "Each owner or operator of an affected source at an integrated iron and steel manufacturing facility that is (or is part of) a major source of HAP emissions must comply with this final rule."

§63.7782 - Parts of the plant covered

- (a) This subpart applies to each new and existing affected source at an integrated iron and steel manufacturing facility.
- (b) The affected sources are each new or existing sinter plant, blast furnace, and basic oxygen

[&]quot;A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

process furnace (BOPF) shop at an integrated iron and steel manufacturing facility. (c)This subpart covers emissions from the sinter plant windbox exhaust, discharge end, and sinter cooler; the blast furnace casthouse; and the BOPF shop including each individual BOPF and shop ancillary operations (hot metal transfer, hot metal desulfurization, slag skimming, and ladle metallurgy).

(d) The sinter plant, blast furnace, or **BOPF shop** at your integrated iron and steel manufacturing facility exists if you commenced construction or reconstruction of the affected source before July 13, 2001.

§63.7783 - Compliance Dates

(a) If you have an existing affected source, the Permittee must comply with each emission limitation and operation and maintenance requirement in this subpart that applies to the Permittee no later than May 22, 2006.

(e)You must meet the notification and schedule requirements in Sec. 63.7840. Several of these notifications must be submitted before the compliance date for your affected source.

Applicable Standards/Limits:

Control of Visible Emissions (Opacity) and Particulate Matter

§63.7790(a) – Emission and Opacity Limits

(b) The Permittee must meet each emission limit and opacity limit in Table 1 Subpart FFFFF, Part 63 that applies.

For:

9. Each BOPF at a new or existing shop

- b. You must not cause to be discharged to the atmosphere any gases that exit from a primary emission control system for a BOPF with an open hood system that contain, on a flow-weighted basis, particulate matter in excess of **0.02 gr/dscf** during the steel production cycle for an existing BOPF shop or 0.01 gr/dscf during the steel production cycle for a new BOPF shop²: and
- c.You must not cause to be discharged to the atmosphere any gases that exit from a control device used solely for the collection of secondary emissions from the BOPF that contain particulate matter in excess of **0.01 gr/dscf** for an existing BOPF shop or 0.0052 gr/dscf for a new BOPF shop.
- **10**. Each hot metal transfer, skimming, and desulfurization operation at a new or existing BOPF shop You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of **0.01 gr/dscf** for an existing BOPF shop or 0.003 gr/dscf for a new BOPF shop.
- **11.** Each ladle metallurgy operation at a new or existing BOPF shop- You must not cause to be discharged to the atmosphere any gases that exit from a control device that contain particulate matter in excess of **0.01 gr/dscf** for an existing BOPF shop or 0.004 gr/dscf for a new BOPF shop.
- **12**. Each roof monitoring at an existing BOPF shop You must not cause to be discharged to the atmosphere any secondary emissions that exit any opening in the BOPF shop or any other building housing the BOPF or BOPF shop operation that exhibit opacity greater than **20 percent (3-minute average)**.

Note:

² This limit applies to control devices operated in parallel for a single BOPF during the oxygen blow.

§63.7810 - General Compliance Requirements

(a) You must be in compliance with the emission limitations and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and

malfunction as defined in Sec. 63.2.

- (b) During the period between the compliance date specified for your affected source in Sec. 63.7783 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.
- (c) You must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in Sec. 63.6(e)(3).

Operational Standards

§63.7790(b) - Operating Limits

- (b) You must meet each operating limit for capture systems and control devices in paragraphs (b)(1) through (3) of this section that applies to you.
 - (1) You must operate each capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or **to secondary emissions from a BOPF** at or above the lowest value or settings established for the operating limits in your operation and maintenance plan;
 - (2) For each venturi scrubber applied to meet any particulate emission limit in Table 1, Subpart FFFFF, Part 63, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.
 - (3) For each electrostatic precipitator applied to emissions from a **BOPF**, you must maintain the average opacity of emissions for each 6- minute period at or below the site-specific opacity value corresponding to the 99 percent upper confidence limit on the mean of a normal distribution of average opacity values established during the initial performance test.
- (c) An owner or operator who uses an air pollution control device other than a baghouse, venturi scrubber, or electrostatic precipitator must comply in accordance with requirements provided in §63.7790 (c) of this subpart.

§63.7800(a) - Operation and Maintenance Requirements

- (a) As required by Sec. 63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.
- **(b)** You must prepare and operate at all times according to a written operation and maintenance plan for each capture system or control device subject to an operating limit in Sec. 63.7790(b). Each plan must address the elements in paragraphs (b)(1) through (5) of this section.

Testing Requirements:

§63.7820 - Initial Compliance Requirements

The Permittee must conduct a performance test to demonstrate initial compliance with each emission and **opacity limit** in Table 1, Subpart FFFFF, Part 63 that applies. The Permittee must conduct the performance tests within 180 calendar days after the compliance date that is specified in §63.7783 for the affected source and report the results in the notification of compliance status.

§63.7821 - The Permittee must conduct subsequent performance test to demonstrate compliance with all applicable PM and opacity limits in Table 3, Subpart FFFF, Part 63 but no less frequently than twice (at mid term and renewal) during each term of the Title V operating permit.

§63.7822 – §63.7826. All applicable performance tests and compliance demonstrations must be conducted in accordance with the test methods as provided in §63.7822, §63.7823, and §63.7824. The Permittee must comply with the requirements in §63.7825 and §63.7826 to demonstrate initial compliance with applicable emission limitations and with the operation and maintenance requirements that apply respectively.

Monitoring Requirements:

§63.7830 - Continuous Compliance Monitoring

- (a) For each capture system subject to an operating limit in Sec. 63.7790(b)(1) established in your capture system operation and maintenance plan, you must install, operate, and maintain a CPMS according to the requirements in Sec. 63.7831(e) and the requirements in paragraphs (a)(1) through (3) of this section.
- (1) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.
- (2) If you use a flow measurement device to monitor the operating limit parameter for a sinter plant discharge end or blast furnace casthouse, you must monitor the hourly average rate (e.g. the hourly average actual volumetric flow rate through each separately ducted hood, the average hourly total volumetric flow rate at the inlet to the control device) according to the requirements in §63.7832.
- (3) If you use a flow measurement device to monitor the operating limit parameter for a capture system applied to **secondary emissions from a BOPF**, you must monitor the average rate for each steel production cycle (e.g., the average actual volumetric flow rate through each separately ducted hood for each steel production cycle, the average total volumetric flow rate at the inlet to the control device for each steel production cycle) according to the requirements in §63.7832.
- (b) For each baghouse applied to meet any particulate emission limit in Table 1 of this subpart, you must install, operate, and maintain a bag leak detection system according to Sec. 63.7831(f), monitor the relative change in particulate matter loadings according to the requirements in Sec. 63.7832, and conduct inspections at their specified frequencies according to the requirements in paragraphs (b)(1) through (8) of this section.
- (1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.
- (2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.
- (3) Check the compressed air supply for pulsejet baghouses each day.
- (4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.
- (5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.
- (6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.
- (7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.
- (8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.
- (c) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in Sec. 63.7790(b)(2), you must install, operate, and maintain CPMS according to the requirements in Sec. 63.7831(g) and monitor the hourly average pressure drop and water flow rate according to the requirements in Sec. 63.7832.

Sec. 63.7790(b)(2), - For each venturi scrubber applied to meet any particulate emission limit in Table 1, Subpart FFFFF, part 63, you must maintain the hourly average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

§63.7833 - Compliance demonstration with applicable emission limitations

- (a) You must demonstrate continuous compliance for each affected source subject to an emission or opacity limit in Sec. 63.7790(a) by meeting the requirements in Table 3, Subpart FFFFF, Part 63.
- **(b)** You must demonstrate continuous compliance for each capture system subject to an operating limit in Sec. 63.7790(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.
- (1) Operate the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan;
- (2) Monitor the capture system according to the requirements in Sec. 63.7830(a) and collect, reduce, and record the monitoring data for each of the operating limit parameters according to the applicable requirements of this subpart;
- **(c)** For each baghouse applied to meet any particulate emission limit in Table 1, Subpart FFFFF, Part 63, you must demonstrate continuous compliance by completing the requirements in paragraphs (c)(1) and (2) of this section.
- (1) Maintaining records of the time you initiated corrective action in the event of a bag leak detection system alarm, the corrective actions(s) taken, and the date on which corrective action was completed.
- (2) Inspecting and maintaining each baghouse according to the requirements in Sec. 63.7831(f) and recording all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in Sec. 63.7831(f)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.
- (d) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in Sec. 63.7790(b)(2), you must demonstrate continuous compliance by completing the requirements of paragraphs (d)(1) through (3) of this section.
- (1) Maintaining the hourly average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;
- (2) Operating and maintaining each venturi scrubber CPMS according to Sec. 63.7831(g) and recording all information needed to document conformance with these requirements; and
- (3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to Sec. 63.7831(b) and recording all information needed to document conformance with these requirements.

Record Keeping Requirements:

§63.7840 - Records to be Maintained

- (a) You must keep the following records:
- (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in Sec. 63.10(b)(2)(xiv).
- (2) The records in Sec. 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
- (3)Records of performance tests, performance evaluations, and opacity observations as required in Sec. 63.10(b)(2)(viii)
- (c) You must keep the records required in Sec. 63.6(h)(6) for visual observations.
- (d) You must keep the records required in Sec. Sec. 63.7833 and 63.7834 to show continuous compliance with each emission limitation and operation and maintenance requirement that

applies to you.

§63.7843 - Other Record keeping Requirements

- (a) Your records must be in a form suitable and readily available for expeditious review, according to Sec. 63.10(b)(1).
- **(b)** As specified in Sec. 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to Sec. 63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Reporting Requirements:

§63.7840 - Notification Requirements

- (a) You must submit all of the notifications in Sec. Sec. 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.
- (**b**) As specified in Sec. 63.9(b)(2), if you startup your affected source before May 20, 2003, you must submit your initial notification no later than September 17, 2003.
- (d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in Sec. 63.7(b)(1).
- (e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to Sec. 63.9(h)(2)(ii).
- (1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.
- (2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to Sec. 63.10(d)(2).

§63.7841 - Reporting Requirements

- (a) <u>Compliance report due dates</u>. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.
- (b) Compliance report contents. Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.
- (c) <u>Immediate startup</u>, shutdown, and <u>malfunction report</u>. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in Sec. 63.10(d)(5)(ii).
- (d) Part 70 monitoring report. If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report

does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

6 Emissions Unit Number(s) - Continuous Caster [6-0943]

Continuous caster consisting of:

- 1) **SMCCLMB:** Caster Ladle Metallurgy with Baghouse (SMCCLMBH).
- 2) Slab Caster with (2) Cooling Water Stack Vent #1 SCCCW1 & Stack Vent #2 SCCCW2.
- 3) **PMPS**: Slitting.

SMCCTD: Tundish Drying [insignificant activity].

SMCCNSP: Tundish Nozzle Shroud Preheating [insignificant activity].

SMCCTP: Tundish Preheating [insignificant activity].

Applicable Standards/Limits:

A. Control of Visible Emissions

For Baghouse only

COMAR 26.11.10.03A(1) - Visible Emissions

"A person may not cause or permit the discharge of confined emissions from any installation, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.10.03A(2) – Exceptions. "Sections A(1) of this regulation does not apply to the following: (e) Confined emissions resulting from start-ups, process modifications or adjustments, or occasional cleaning of control equipment if: (i) The visible emissions are not greater than 40 percent opacity; and (ii) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

B. Control of Particulate Matter

For baghouse only

COMAR 26.11.10.04A - Confined Emissions

"A person may not cause or permit the discharge of confined emissions of particulate matter in excess of 0.03 gr/scfd (68.7 mg/dscm) from any iron or steel production installation."

For slitting operation only

COMAR 26.11.10.04B(1) – Particulate Matter Fugitive Emissions

"A person may not cause or permit the discharge of fugitive emissions of particulate matter from an iron and steel production installation unless reasonable control methods are employed to minimize emissions. These methods include the use of hoods and control equipment to capture emissions, other control techniques, and process restrictions"

C. Control of VOC Emissions

COMAR 26.11.10.06D - Control of VOC Emissions for Continuous Casters.

"A person who owns or operates a continuous caster shall skim oil and grease from the cooling water at the continuous caster waste water treatment facility."

D. **Operational Limit**

Continuous (Wide) Caster

For the purpose of establishing an emission baseline relative to the contemporaneous period for emissions, the combined caster (#1 & #2) design capacity is considered to be 4.3 million tons per year of slab produced (calculated on a 12-month rolling basis) and the emissions associated with this capacity are considered to be:

Pollutant Emissions Limits (tons per year) These must be on a 12 month rolling basis in order to practically enforceable. The production limits alone do not create a practically enforceable limit on PTE

 $\begin{array}{cccc} PM_{10} & & 28 \\ VOC & & 16 \\ NO_x & & 5 \\ CO & & 2 \\ SO_2 & & 1 \\ \end{array}$

Any exceedance of these emission levels requires the Permittee to reassess, within 30 days of the exceedance, whether any applicable PSD/NSR thresholds have been exceeded and to submit documentation associated with the reassessment to the Department. [Reference: MDE PTC 03 6-0943M, Part C(1), issued 1/31/2003].

Testing Requirements:

- A. None.
- B. None.
- C. None.
- D. None.

Monitoring Requirements:

- A. The Permittee shall visually inspect the exhaust gases from all control equipment [baghouse] stack for visible emissions once a week for an 18-minute period and shall record the results of each observation. If no visible emissions are observed in six consecutive months for the exhaust stack of any emission unit, the Permittee may decrease the frequency of visual inspection from once weekly to once monthly for the exhaust stack of that emission unit. If visible emissions are observed during any monthly visual inspection, the Permittee must resume visible inspection of the exhaust stack of that emission unit once a week basis and maintain that schedule until no visible emissions are observed in six consecutive months. If no visible emissions are observed during the once a month visible inspection for the exhaust stack of any emission unit, the Permittee may decrease the frequency of visual inspection from monthly to semi-annually for the exhaust stack of that emission unit. If visible emissions are observed during any semi-annual visible inspection, the Permittee must resume visible inspection of the exhaust stack of that emission unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly inspections. [Reference: COMAR 26.11.03.06C]
 - B. **For Baghouse**: The Permittee shall develop and maintain a preventive maintenance plan for the baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frames established in the plan and shall maintain a log with records of the dates and description of the maintenance that was performed. [Reference: COMAR 26.11.03.06C]No pressure drop requirement?

For Slitting Operation: The Permittee shall prepare and maintain a plan that contains an explanation of the reasonable precautions that will be used to prevent particulate matter from becoming airborne. Once a month, the Permittee shall perform an inspection of the operations to verify that the reasonable precautions are being implemented. The Permittee shall reevaluate the effectiveness of the reasonable precautions plan annually. [Reference: COMAR 26.11.03.06C]. Hasn't this already been done? If not, by when must they develop the plan?

C. None.

D. None. The emission limits are not practically enforceable if there is no monitoring associated with them. Whatever the basis of these limits are/were, they should be the basis for some type of monitoring. The fact sheet does not have any explanation for these limits or why there isn't any periodic monitoring.

Record Keeping Requirements:

- A. The Permittee shall maintain on site a log of the dates and results of visible emissions observations for a period of at least five years. [Reference: COMAR 26.11.03.06C]
- B. For Baghouse: The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain records of the baghouse malfunctions and the corrective actions taken to bring into proper operation. [Reference: COMAR 26.11.03.06C]. For Slitting Operation: The Permittee shall maintain the plan of reasonable precautions and keep records of dates and results of visual observation of the operations. These records shall be kept on site for a period of at least five years. [Reference: COMAR 26.11.03.06C].
- C. The Permittee shall record the dates and times during which the oil and grease are skimmed from the cooling water at the continuous casters. [Reference: COMAR 26.11.03.06C]
- D. Operational Limit

The Permittee shall maintain monthly records of steel slab production on a 12-month rolling period from the Caster Shop. [Reference: MDE PTC number 6-0943M, Part D(1),issued 1/31/2003].

Reporting Requirements:

- A. The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations." The Permittee shall also make the records of visual emission inspections available to the Department upon request. [Reference: COMAR 26.11.03.06C].
- B. For Baghouse: The Permittee shall submit the maintenance plan and records of maintenance activities to the Department upon request. [Reference: COMAR 26.11.03.06C].
- C. For Slitting Operation: The Permittee shall submit the plan and records of visual observation of the operations to the Department upon request. [Reference: COMAR 26.11.03.06C]
- D. The Permittee shall make available to the Department upon request the record of the dates and times during which the oil and grease are skimmed at the cooling water at the continuous caster. [Reference: COMAR 26.11.03.06C]
- E. Operational Limit

The Permittee shall report to the Department the monthly records of steel slab production from the caster shop on a quarterly basis. The Permittee shall begin submitting quarterly reports by the 30th day following the end of each calendar quarter. The reports shall confirm that the combined emissions from the Caster Shop do not exceed specified limits calculated over a rolling 12-month period. [Reference: MDE PTC number 6-0943M, Part D(2), issued 1/31/2003]. What about the emissions limits?

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

7 Emissions Unit Number(s) – Slab Conditioning

HSMSS56: 56" Slab Conditioning.

5 slab slitting machines [6-2761]

1 group of 24 slab cutting torches and 1 group of 8 scarfing torches located at the shipment Prep Yard in the Old Plate Mill. [6-2760][

1 group of 15 slab handling and 1 group of 12 scarfing torches located at the Hot strip Mill [6-2761]

Applicable Standards/Limits:

A. Control of Particulate Matter

COMAR 26.11.10.04B(1) - Particulate Matter Fugitive Emissions

"A person may not cause or permit the discharge of fugitive emissions of particulate matter from an iron and steel production installation unless reasonable control methods are employed to minimize emissions. These methods include the use of hoods and control equipment to capture emissions, other control techniques, and process restrictions."

B. Operational Limit

The Permittee shall not allow the slab slitting operation to process more than 1,000,000 tons of slab per year without first obtaining approval from the Department [Reference: MDE 03-6-2589N, Part C(3), issued May 17, 2000].

Testing Requirements:

- A. None.
- B. None.

Monitoring Requirements:

- A. The Permittee shall prepare and maintain a plan that contains an explanation of the reasonable precautions that will be used to prevent particulate matter from becoming airborne. Once a month, the Permittee shall perform an inspection of the operations to verify that the reasonable precautions are being implemented. The Permittee shall reevaluate the effectiveness of the reasonable precautions plan annually. [Reference: COMAR 26.11.03.06C].
- B. None.

Record Keeping Requirements:

- A. The Permittee shall maintain the plan of reasonable precautions and keep records of dates and results of visual observation of the operations. These records shall be kept on site for a period of at least five years. [Reference: COMAR 26.11.03.06C].
- B. Operational Limit.In my version of WORD it notes that this language has been deleted. Obviously there needs to be recordkeeping requirements for the operating limit and it looks like the language that was deleted was okay perhaps this was accidental?

Reporting Requirements:

- A. The Permittee shall submit the plan and records of visual observation of the operations to the Department upon request. [Reference: COMAR 26.11.03.06C].
- B. None.

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

8 <u>Emissions Unit Number(s) – Hot Strip Mill [6-0947]</u>

HSMFAB: Hot Strip Mill A&B Reheat Furnace [burns natural gas or No. 6 fuel oil].

HSMCT: Hot Strip Mill Contact Water Cooling Tower [insignificant activity].

HSMRM: Hot Strip Mill Rolling Mill.

HSMMSH: Mill Scale Handling [insignificant activity]

Applicable Standards/Limits:

A. Control of Visible Emissions

For Reheat Furnaces only

COMAR 26.11.10.03A(1) - Visible Emissions

"A person may not cause or permit the discharge of confined emissions from any installation, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.10.03A(2) – Exceptions. "Sections A(1) of this regulation does not apply to the following: (e) Confined emissions resulting from start-ups, process modifications or adjustments, or occasional cleaning of control equipment if: (i) The visible emissions are not greater than 40 percent opacity; and (ii) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

B. Control of Particulate Matter

For Reheat Furnaces only

COMAR 26.11.10.04A - Confined Emissions

"A person may not cause or permit the discharge of confined emissions of particulate matter in excess of 0.03 gr/scfd (68.7 mg/dscm) from any iron or steel production installation."

For Hot Strip rolling mill only

COMAR 26.11.10.04B(1) - Particulate Matter Fugitive Emissions

"A person may not cause or permit the discharge of fugitive emissions of particulate matter from an iron and steel production installation unless reasonable control methods are employed to minimize emissions. These methods include the use of hoods and control equipment to capture emissions, other control techniques, and process restrictions"

C. Control of VOC Emissions

For Hot Strip Rolling Mill (HSMRM) only

COMAR 26.11.10.06(B) - Control of VOC Emissions from Installations That Use Rolling Oils or Rust Preventive Oils

"The following installations may not use oils or rust preventive oils that have a vapor pressure greater than 1 millimeter of mercury at 25 Celsius: (1) Hot rolling operations."

D. Control of NO_x Emissions

For Reheat Furnaces only

COMAR 26.11.09.08J – Requirements for Industrial Furnaces and Other Miscellaneous Installations that Cause Emissions of NO_x. "A person who owns or operates any installation other than fuel-burning equipment that causes NO_x emissions shall:

- Maintain good operating practices as recommended by the equipment vendor to minimize emissions;
- 2) Prepare and implement a written in-house training program for all operators of these

- installations that include instruction on good operating and maintenance practices for the particular installation;
- 3) Maintain and make available to the Department, upon request, the written in-house operator training program;
- 4) Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year; and
- 5) Maintain operator training attendance records for each operator at the site for at least 2 years and make these records available to the Department upon request."

What about part 63 subpart Q for cooling towers? There should be a prohibition on the use of Cr for water treatment.

Testing Requirements:

- A. None.
- B. None.
- C. None.
- D. None.

Monitoring Requirements:

- A. When burning natural gas in the reheat furnaces no visible observation required. When burning No. 6 fuel oil, the Permittee shall conduct an EPA Method 9 observation once a week for a 12-minute period on the furnace stack to demonstrate compliance with visible emission limit. [Reference: COMAR 26.11.03.06C].
- B. For Reheat Furnace: The Permittee shall develop and maintain a preventive maintenance plan for the furnace that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frames established in the plan and shall maintain a log with records of the dates and description of the maintenance that was performed. [Reference: COMAR 26.11.03.06C]
 - For Hot Strip Rolling Mill: The Permittee shall prepare and maintain a plan that contains an explanation of the reasonable precautions that will be used to prevent particulate matter from becoming airborne. Once a month, the Permittee shall perform an inspection of the operations to verify that the reasonable precautions are being implemented. The Permittee shall reevaluate the effectiveness of the reasonable precautions plan annually. [Reference: COMAR 26.11.03.06C]. By when...doesn't it already exist, etc....
- C. None
- D. The Permittee shall maintain good operating practices as recommended by the equipment vendor to minimize NO_x emissions; [Reference: COMAR 26.11.09.08J(1)]. The Permittee shall prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation. (Note: COMAR 26.11.0.08B(5)(a) states that "for the purpose of this regulation the equipment operator trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operations." Reference: COMAR 26.11.09.08J(2)] By when....etc

Record Keeping Requirements:

A. The Permittee shall maintain a log of the dates and results of the EPA Method 9 observations on site for at least five years and make available to the Department upon

request. [Reference: COMAR 26.11.03.06C].

B. For Reheat Furnace: The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain records of the baghouse malfunctions and the corrective actions taken to bring into proper operation. [Reference: COMAR 26.11.03.06C].

For Hot Strip Rolling Mill: The Permittee shall maintain the plan of reasonable precautions and keep records of dates and results of visual observation of the operations. These records shall be kept on site for a period of at least five years. [Reference: COMAR 26.11.03.06C].

- C. For <u>HSMRM only:</u> The Permittee shall keep MSDS or other data sheets, that indicates the vapor pressure of the rolling oils and rust preventative oils that are used at the hot rolling mill. These records shall be kept on site for at least five (5) years and shall be made available to the Department upon request. [Reference: COMAR 26.11.03.06C].
- D. The Permittee shall maintain written in-house operator training and operator training attendance records for each operator at the site for at least two years. The Permittee shall make available to the Department upon request, the written in-house operator-training program and records of operator training attendance. [Reference: COMAR 26.11.09.08J(2)].

Reporting Requirements:

- A. None.
- B. For Reheat Furnace and Tower: The Permittee shall submit the maintenance plan and records of maintenance activities to the Department upon request. [Reference: COMAR 26.11.03.06C].

For Hot Strip Rolling Mill: The Permittee shall submit the plan and records of visual observation of the operations to the Department upon request. [Reference: COMAR 26.11.03.06C]

- C. None.
- D. None.

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

9 Emissions Unit Number(s) – Coating Lines

Coated Products Group.

No. 1 Coating (Galvanize) line [6-0948] consisting of the following:

Annealing Gas Preheater (CSM1GPH)

Selas Reheat Furnace (CSM1GSF).

Melt Pot (CSM1GMPT)

Oiler. (CSM1GMH)

Steam Wiper. (CSM1GSW)

Passivation.(CSM1GCP)

No. 2 Coating (Galvanize) Line [6-0948] consisting of the following:

Galvanneal Furnace. (CSM2GGH)

Selas Reheat Furnace. (CSM2GSF)

Steam Superheater. (CSM2GSS)

Melt Pot. (CSM2GMPT)

Oiler. (CSM2GMH)

Steam Dryer. (CSM2GSS) Steam Wiper. (CSM2GSW)

No.3 Coating (Galvalume/Galvanize) Line [6-0948] consisting of the following:

Selas Reheat Furnace. CSM3GGH

Strip Preheater. CSM3GPH Melt Pot. (CSM3GMPT) Oiler (CSM3GMH)

Roll coater and caustic washer (CSM3GRC)

No. 4 Coating Hot Dip line [6-1732] consisting of the following:

Strip Melt Pot. CSM4HDMPT

Strip Preheater/Annealing Furnace. CSM4HDAF

Roll coater (CSM4HDRC)
Oiler. (CSM4HDEO)

Alkaline cleaning tank/cleaner storage (CSM4HDAC) with scrubber

Applicable Standards/Limits:

A. Control of Visible Emissions

For Scrubber, super heaters, and reheat furnace(s) – I assume it applies to <u>all</u> the reheat furnaces only Why not the galvaneal and annealing furnaces and preheaters? COMAR 26.11.10.03A(1) – <u>Visible Emissions</u>

"A person may not cause or permit the discharge of confined emissions from any installation, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.10.03A(2) – Exceptions. "Sections A(1) of this regulation does not apply to the following: (e) Confined emissions resulting from start-ups, process modifications or adjustments, or occasional cleaning of control equipment if: (i) The visible emissions are not greater than 40 percent opacity; and (ii) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

B. Control of Particulate Matter

For Scrubber, super heaters, and reheat furnace_only Same comments as above COMAR 26.11.10.04A – Confined Emissions

"A person may not cause or permit the discharge of confined emissions of particulate matter in excess of 0.03 gr/scfd (68.7 mg/dscm) from any iron or steel production installation."

For Oilers, Melt Pots, roll coaters only

COMAR 26.11.10.04B(1) - Particulate Matter Fugitive Emissions

"A person may not cause or permit the discharge of fugitive emissions of particulate matter from an iron and steel production installation unless reasonable control methods are employed to minimize emissions. These methods include the use of hoods and control equipment to capture emissions, other control techniques, and process restrictions"

C. Control of VOC Emissions

COMAR 26.11.10.06(B) - Control of VOC Emissions from Installations That Use Rolling Oils or Rust Preventive Oils

"The following installations may not use oils or rust preventive oils that have a vapor pressure greater than 1 millimeter of mercury at 25 Celsius: (1) Hot rolling operations."

COMAR 26.11.19.05(B) – <u>Coil Coating</u>. <u>Emission Standards</u> "A person may not cause or permit the discharge into the atmosphere of any VOC from coil coating in excess of 2.6 pounds per gallon of coating applied (minus water) (0.31 kilogram/liter of coating applied (minus water))."

For No. 3 Coating Line Roll Coater [6-0948] and No. 4 Coating Line Roll Coater [6-1732] only

40 CFR Part 60 Subpart TT – New Source Performance Standards for Metal Coil Surface Coating

§60.460 - Applicability and designation of affected facility.

- (a) The provisions of this subpart apply to the following affected facilities in a metal coil surface coating operation: each prime coat operation, each finish coat operation, and each prime and finish coat operation combined when the finish coat is applied wet on wet over the prime coat and both coatings are cured simultaneously.
- (b) This subpart applies to any facility identified in paragraph (a) of this section that commences construction, modification, or reconstruction after January 5, 1981. §60.462(a)(1) Standards for VOCs
- "(a) On and after the date on which §60.8 requires a performance test to be completed, each owner or operator subject to this subpart shall not cause to be discharged into the atmosphere more than: (1) 0.28 kilogram VOC per liter (kg VOC/I) of coating solids applied for each calendar month for each affected facility that does not use an emission control device(s)"

D. Operational Limit

For the No. 4 Coating Line Roll Coater (Emission Unit CSM4HDRC) only

- (1) The alkali-cleaning unit shall be equipped with a packed bed scrubber that has a monitor and recorder to continuously monitor and record the flow rate of the scrubbing solution when the alkali-cleaning unit is in operation.). [Reference: MDE PTC 03-6-1732M, Section C(3), issued 4/12/2001]
- (2) The Permittee is prohibited from operating the alkali-cleaning unit unless the packed bed scrubber is on-line and operating properly. The flow rate of the scrubbing solution into the scrubber shall be within the stack test specification (minimum of 7 gallons per minute). What stack test? Must be more specific there is no testing requirement for the operational limit. The Permittee shall deviate for this specification if it can be demonstrated by methods acceptable to the Department that the unit remain in compliance with the regulations stated in Part B(3)(e) and (i). [Reference: MDE PTC 03-6-1732M, Section D(1), issued 4/12/2001]
- (3) Gases from galvanizing tank shall not be directly vented outside of the building. [Reference: MDE PTC 03-6-1732N, Section D(2), issued 4/12/2001]
- (4) The Permittee shall not cause or permit the discharge into the atmosphere more than 0.28 kilogram VOC per liter (kg VOC//) of coating solids applied for each calendar month for each affected facility that does not use an emission control device(s).

[Reference : §60.462(a)(1)-NSPS Subpart TT, & MDE PTC 03-6-1732M, Part (D)(3), issued 4/12/2001]

(5) The galvanizing and galvalume hot dip coating lines shall be properly maintained in accordance with ISG's preventative maintenance plan. A visual inspection shall be performed daily to ensure the integrity and proper operation of the alkali-cleaning tank. [Reference: MDE PTC 03-6-1732M, Part (E)(1, issued 4/12/2001]

For No. 3 Coating Line – Caustic Washer with scrubber (Emission Unit: CSM3GRC)

- (1) The caustic washing system shall be equipped with an absorbing scrubber that has a monitor and recorder to continuously monitor and record the flow rate of the scrubbing solution when in the caustic washing system is in operation. [Reference: MDE 03-6-0948M, Part C(3), issued 8/22/1997]
- (2) The minimum flow rate of scrubbing solution entering the absorbing scrubber shall be at least 30 gallons per minute. The Permittee may deviate from this flow rate, if it can

demonstrate by methods acceptable to the Department that the system will remain in compliance.

[Reference MDE PTC 6-0948, Part C(4), issued 8/22/1997]

Testing Requirements:

- A. None.
- B. None.
- C. The Permittee shall conduct an initial VOC performance test as required under 40 CFR 60.8(a) and thereafter a performance test for each calendar month for the metal roll coating operation according to the procedures in the 40 CFR 60.463-Performance test. [Reference MDE PTC 03-6-1732M, Part (E)(3)]

The Permittee shall conduct an initial VOC performance test as required under 40 CFR 60.8(a) and thereafter a performance test for each calendar month for the metal roll coating operation according to the procedures in the 40 CFR 60.463-Performance test. **[Reference MDE PTC 03-6-1732M, Part (E)(3)]**

§ 60.463(c)(1) - Performance test and compliance provisions

- (c) The owner or operator shall use the following procedures for determining monthly volume-weighted average emissions of VOCs in kg/l of coating solids applied.
- (1) An owner or operator shall use the following procedures for each affected facility that does not use a capture system and control device to comply with the emission limit specified under §60.462(a)(1). The owner or operator shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating or by an analysis of each coating, as received, using Method 24. The Administrator may require the owner or operator who uses formulation data supplied by the manufacturer of the coatings to determine the VOC content of coatings using Method 24 or an equivalent or alternative method. The owner or operator shall determine the volume of coating and the mass of VOC-solvent added to coatings from company records on a monthly basis. If a common coating distribution system serves more than one affected facility or serves both affected and existing facilities, the owner or operator shall estimate the volume of coating used at each affected facility by using the average dry weight of coating and the surface area coated by each affected and existing facility or by other procedures acceptable to the Administrator.

§60.466 - Test methods and procedures;

- (a)The reference methods in appendix A to this part, except as provided under §60.8(b), shall be used to determine compliance with §60.462 as follows: (1) Reference Method 24, or data provided by the formulator of the coating for determining the VOC content of each coating as applied to the surface of the metal coil. In the event of a dispute, Reference Method 24 shall be the reference method. When VOC content of waterborne coatings, determined by the Reference Method 24, is used to determine compliance of affected facilities, the results of the Reference Method 24 analysis shall be adjusted as described in section 4.4 of Reference Method 24.
- (b)For Method 24, the coating sample must be at least a 1-liter sample taken at a point where the sample will be representative of the coating as applied to the surface of the metal coil."
- D. <u>Operational Limits</u> None.

Monitoring Requirements:

- The Permittee shall visually inspect the exhaust gases from all control equipment [scrubber, furnace, super heaters annealing furnaces, etc??] stack for visible emissions once a week for an 18-minute period and shall record the results of each observation. If no visible emissions are observed in six consecutive months for the exhaust stack of any emission unit, the Permittee may decrease the frequency of visual inspection from once weekly to once monthly for the exhaust stack of that emission unit. If visible emissions are observed during any monthly visual inspection, the Permittee must resume visible inspection of the exhaust stack of that emission unit once a week basis and maintain that schedule until no visible emissions are observed in six consecutive months. If no visible emissions are observed during the once a month visible inspection for the exhaust stack of any emission unit, the Permittee may decrease the frequency of visual inspection from monthly to semi-annually for the exhaust stack of that emission unit. If visible emissions are observed during any semi-annual visible inspection, the Permittee must resume visible inspection of the exhaust stack of that emission unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly inspections. [Reference: COMAR 26.11.03.06C]
- B. For Scrubber, super heaters, and reheat furnace only: The Permittee shall develop and maintain a preventive maintenance plan for the scrubber, super heaters and reheat furnace that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frames established in the plan and shall maintain a log with records of the dates and description of the maintenance that was performed. [Reference: COMAR 26.11.03.06C]

 For Oilers, Melt Pots, roll coaters only: The Permittee shall prepare and maintain a plan that contains an explanation of the reasonable precautions that will be used to prevent particulate matter from becoming airborne. Once a month, the Permittee shall perform an inspection of the operations to verify that the reasonable precautions are being implemented. The Permittee shall reevaluate the effectiveness of the reasonable precautions plan annually. [Reference: COMAR 26.11.03.06C].By when...isn't it already being done, etc
- C. §60.464(a) Monitoring of emissions and operations
 - "(a) Where compliance with the numerical limit specified in §60.462(a) (1) or (2) is achieved through the use of low VOC-content coatings without the use of emission control devices or through the use of higher VOC-content coatings in conjunction with emission control devices, the owner or operator shall compute and record the average VOC content of coatings applied during each calendar month for each affected facility, according to the equations provided in §60.463."
- D. Operational Limit.

The flow rate of the scrubbing solution entering the scrubber connected to the alkalicleaning unit shall be continuously monitored and recorded. [Reference: MDE PTC 03-6-1732M, Part E(2), issued 4/12/2001]

The Permittee shall conduct a performance test for each calendar month for the metal roll coating operation according to the procedures in 40CFR §60-463 – Performance Test and Compliance Provisions. [Reference: MDE PTC 03-6-1732M, Part E(3), issued 4/12/2001]

The Permittee shall visually inspect the scrubbers daily. [Reference: MDE PTC 03-6-1732N. Section D(1)]

The Permittee shall continuously monitor and record the flow rate of the scrubbing

solution entering the scrubber connected to the alkali-cleaning unit. [Reference: MDE PTC 03-6-1732M, part E(2)]

Record Keeping Requirements:

- A. The Permittee shall maintain on site a log of the dates and results of visible emissions observations for a period of at least five years. [Reference: COMAR 26.11.03.06C].
- B. **For Scrubber, super heaters, and reheat furnace only**: The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain records of the malfunctions and the corrective actions taken to bring into proper operation. **[Reference: COMAR 26.11.03.06C].**

For Oilers, Melt Pots, roll coaters only: The Permittee shall maintain the plan of reasonable precautions and keep records of dates and results of visual observation of the operations. These records shall be kept on site for a period of at least five years. [Reference: COMAR 26.11.03.06C].

C. The Permittee shall keep MSDS or other data sheets, that indicates the vapor pressure of the rolling oils and rust preventative oils that are used at the hot rolling mill. These records shall be kept on site for at least five (5) years and shall be made available to the Department upon request. [Reference: COMAR 26.11.03.06C].

The Permittee shall: compute and record the average VOC content of coatings applied during each calendar month for the metal roll coating operation according to the equations provided in 40 CFR 60.463; [Reference: MDE PTC 03-6-0948M, Part (D)(3) and MDE PTC 03-6-1732M, Part (F)(3)] and maintain at the site, for a period of five (5) years, records of all data and calculations used to determine monthly VOC emissions from the metal roll coating operation and to determine the monthly emission limit found in Part B(20 or Part B(1)(a)(i) of the permit. [Reference: MDE PTC 03-6-0948M, Part (D)(5) and MDE PTC 03-6-1732M, Part (F)(5)]

§60.465(e) - Record keeping requirements

"(e) Each owner or operator subject to the provisions of this subpart shall maintain at the source, for a period of at least 2 years, records of all data and calculations used to determine monthly VOC emissions from each affected facility and to determine the monthly emission limit, where applicable."

D. Operational Limit.

For No. 4 Alkaline Cleaning Tank/Cleaner Storage with Scrubber only (Emission Unit CSM4HDAC)

The Permittee shall keep records of the flow rate in the scrubber to the alkali-cleaning unit. These records shall be kept on-site for at least five years and be made available to the Department upon request. [Reference MDE PTC 03-6-1732M, Part (F)(1), issued 4/12/20011.

The Permittee shall compute and record the average VOC content of coating applied during each calendar month for the metal roll coating operation according to the equations provided in 40 CFR §60-463. [Reference MDE PTC 03-6-1732M, Part (F)(3), issued 4/12/20011

The Permittee shall maintain at the site, for a period of five years records of all data and calculations used to determine monthly VOC emissions from the metal roll coating operation and to determine the monthly emission limit found in Part B(1)(1)(i).

[Reference MDE PTC 03-6-1732M, Part (F)(5), issued 4/12/2001]

For No. 3 Coating Line – Caustic Washer with scrubber only (Emission Unit: CSM3GRC)

The Permittee shall keep records of the flow rate to the absorbing scrubber. These records shall be kept on site for at least five years and be made available to the Department upon request. [Reference MDE PTC 6-0948, Part C(5), issued 8/22/1997]

Reporting Requirements:

- A. The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations." The Permittee shall also make the records available to the Department upon request. [Reference: COMAR 26.11.03.06C].
- B. For Scrubber, super heaters, and reheat furnace_only: The Permittee shall submit the maintenance plan and records of maintenance activities to the Department upon request. [Reference: COMAR 26.11.03.06C].

For Oilers, Melt Pots, roll coaters only: The Permittee shall submit the plan and records of visual observation of the operations to the Department upon request. [Reference: COMAR 26.11.03.06C]

C. The Permittee shall, following the initial performance test, identify, record, and submit a written report to the Department every calendar quarter of each instance in which the volume-weighted average of the local mass of VOCs emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under 40 CFR 60.462. If no such instances have occurred during a particular quarter, a report stating this shall be submitted to the Department annually. [Reference MDE PTC 03-6-0948M, Part (D)(4) and MDE PTC 03-6-1732M, Part (F)(4)]

For No. 4 Coating Line Roll Coater (Emission Unit CSM4HDRC) §60.465 - Reporting requirements

"(c) Following the initial performance test, the owner or operator of an affected facility shall identify, record, and submit a written report to the Administrator every calendar quarter of each instance in which the volume-weighted average of the local mass of VOCs emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under §60.462. If no such instances have occurred during a particular quarter, a report stating this shall be submitted to the Administrator semiannually."

D. Operational Limit.

The Permittee shall, report any malfunction or temporary increase in the emissions for the #4 hot dip coating line, including roll coating system, to the Department in accordance with the requirements of COMAR 26.11.01.07. [Reference: MDE PTC 03-6-1732M, Part (F)(6), issued 4/12/2001].

For No. 3 Coating Line – Caustic Washer with scrubber only (Emission Unit CSM3GRC)

The Permittee shall report any malfunction or temporary increases in the emissions for the #3 coating line including the caustic washing system to the Department in accordance with the requirements of COMAR 26.11.01.07. [Reference: MDE PTC #03-

6-0948M, issued 8/22/1997]

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

10 Emissions Unit Number(s) - Cold Reduction Mill [6-2371]

Pickling Line equipped with packed bed wet scrubber consisting of the following:

- (1)Electrostatic Oiler. (CRPPLEO)
- (2)Pickling Storage tanks (CRPLPST)
- (3)Pickling tanks (CRPPLPT)
- (4)Scale Breaker (CRPPLSB) with baghouse
- (5) Scrubber?

Tandem Mill (with Mist Eliminator). (CRPTM)

Anti-coil reel scale breaker with baghouse (CRPPLSBARBH)

Skin Pass Mill (with Mist Eliminator) (CRPSPM) with Oiler (CRPSPMEO)

Tension Leveling Line Electrostatic oiler (CRPTLEO-F)

Hydrogen Anneal – Annealing furnaces (CRPHA)

Coil Build-Up Line (CRPCBL) [insignificant activity]

Applicable Standards/Limits:

A. Control of Visible Emissions

For Scrubber and baghouse only

COMAR 26.11.10.03A(1) - Visible Emissions

"A person may not cause or permit the discharge of confined emissions from any installation, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.10.03A(2) – Exceptions. "Sections A(1) of this regulation does not apply to the following: (e) Confined emissions resulting from start-ups, process modifications or adjustments, or occasional cleaning of control equipment if: (i) The visible emissions are not greater than 40 percent opacity; and (ii) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

B. Control of Particulate Matter

For Scrubber and baghouse

COMAR 26.11.10.04A - Confined Emissions

"A person may not cause or permit the discharge of confined emissions of particulate matter in excess of 0.03 gr/scfd (68.7 mf/dscm) from any iron or steel production installation."

For Mills and Oilers only

COMAR 26.11.10.04B(1) - Particulate Matter Fugitive Emissions

"A person may not cause or permit the discharge of fugitive emissions of particulate matter from an iron and steel production installation unless reasonable control methods are employed to minimize emissions. These methods include the use of hoods and control equipment to capture emissions, other control techniques, and process restrictions"

C. Control of VOC Emissions

COMAR 26.11.10.06(B) - Control of VOC Emissions from Installations That Use Rolling Oils or Rust Preventive Oils

A. Applicability.

(1) This regulation applies to a person who owns or operates an installation that has actual VOC emissions of 20 pounds or more per day located at an iron and steel

- production facility that has the potential to emit total plant wide VOC emissions of 25 tons or more per year.
- (2) Roll coaters at hot dip coating installations located at an iron and steel production facility are subject to COMAR 26.11.19.05 and federal New Source Performance Standards incorporated by reference at COMAR 26.11.06.12.
- B. Control of VOC Emissions from Installations That Use Rolling Oils or Rust Preventive Oils. "The following installations may not use oils or rust preventive oils that have a vapor pressure greater than 1 millimeter of mercury at 25 Celsius: (1) Hot rolling operations; (2) Cold rolling operations; and (3) Coating operations including both hot dip coating and electrolytic plating installations."

Should this be D.??? C. is for VOCs not HCI For Steel Pickling operation including Pickling Storage Tanks (CRPLPST) & Pickling Tanks (CRPLPT) only

40 CFR Part 63, Subpart CCC – National Emission Standards for Hazardous Air Pollutants for Steel Pickling – HCl Process Facilities and Hydrochloric Acid Regeneration Plants. **§63.1155** - Applicability.

- (a) The provisions of this subpart apply to the following facilities and plants that are major sources for hazardous air pollutants (HAP) or are parts of facilities that are major sources for HAP:
- (1) All new and existing steel pickling facilities that pickle carbon steel using hydrochloric acid solution that contains 6 percent or more by weight HCl and is at a temperature of 100 °F or higher; and
- (2) All new and existing hydrochloric acid regeneration plants.
- §63.1158 Emission standards for new or reconstructed sources.
- (a) <u>Pickling lines</u>—(1) <u>Continuous pickling lines</u>. No owner or operator of a new or reconstructed affected continuous pickling line at a steel pickling facility shall cause or allow to be discharged into the atmosphere from the affected pickling line:
- (i) Any gases that contain HCI in a concentration in excess of 6 ppmv; or
- (ii)HCl at a mass emission rate that corresponds to a collection efficiency of less than 99 percent."

§63.1160 - Compliance dates and maintenance requirements.

- (a)(2) The owner or operator of a new or reconstructed steel pickling facility and/or hydrochloric acid regeneration plant subject to this subpart that commences construction or reconstruction after September 18, 1997, shall achieve compliance with the requirements of this subpart immediately upon startup of operations or by June 22, 1999, whichever is later.
- (b) <u>Maintenance requirements</u>. (1) The owner or operator of an affected source shall comply with the operation and maintenance requirements prescribed under §63.6(e) of subpart A of this part.
- (2) In addition to the requirements specified in paragraph (b)(1) of this section, the owner or operator shall prepare an operation and maintenance plan for each emission control device to be implemented no later than the compliance date. The plan shall be incorporated by reference into the source's title V permit. All such plans must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:
- (i) Require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance;
- (ii)Require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans;
- (iii) Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;

- (iv) Require an inspection of each scrubber at intervals of no less than 3 months with:
- (A) Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;
- (B) Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;
- (C) Repair or replacement of droplet eliminator elements as needed;
- (D) Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and
- (E) Adjustment of damper settings for consistency with the required airflow.
- (v) If the scrubber is not equipped with a view port or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator may be used.
- (vi) The owner or operator shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of this subpart.
- (vii) The owner or operator shall maintain a record of each inspection, including each item identified in paragraph (b)(2)(iv) of this section, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

Operational Limit

§63.1159 - Operational and equipment standards for existing, new, or reconstructed sources.

(b) Hydrochloric acid storage vessels. The owner or operator of an affected vessel shall provide and operate, except during loading and unloading of acid, a closed-vent system for each vessel. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device.

D. Control of NO_x Emissions

For the Annealing Furnaces only

COMAR 26.11.09.08J – Requirements for Industrial Furnaces and Other Miscellaneous Installations that Cause Emissions of NO_x. - A person who owns or operates any installation other than fuel-burning equipment that causes NO_x emissions shall:

- (1) Maintain good operating practices as recommended by the equipment vendor to minimize NO_x emissions;
- (2) Prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation;
- (3) Maintain and make available to the Department, upon request, the written in-house operator training program;
- (4) Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year; and
- (5) Maintain operator training attendance records for each operator at the site for at least 2 years and make these records available to the Department upon request.

E. Operational Limit

(1) Upon full operation of the new Cold Reduction Mill emissions from the existing equipment related to the cold reduction that will remain in permanent use shall, in the aggregate, not exceed the following limits calculated over a rolling 12-month period:

Pollutant Emissions Limits (tons per year)

PM ₁₀	153.5
VOC	66.3
NO_x	70.5
CO	196.7
SO ₂	0.3

[Reference: MDE PTC 03-6-2371M, Part D(1), issued August 12, 1999]

- (2) The oilers at Tandem Mill and the Skin Pass Mill shall use only low volatility rolling oils (low volatility oil is any oil with a vapor pressure of less than one milliliter of mercury at 25°C). [Reference: MDE PTC 03-6-2371M, Section D(3)(b)(1), issued August 12, 1999]
- (3) The oilers located in the cold reduction mill shall use rust preventative oils with a vapor pressure of less than one milliliter of mercury at 25°C. [Reference: MDE PTC 03-6-2371M, Part D(3)(b)(2), issued August 12, 1999]

Testing Requirements:

- A. None.
- B. None.
- C. For Rolling and Coating operations: None.

For Steel Pickling Operation: §63.1161 - Performance testing and test methods

- (a) Demonstration of compliance. The owner or operator shall conduct an initial performance test for each process or emission control device to determine and demonstrate compliance with the applicable emission limitation according to the requirements in §63.7 of subpart A of this part and in this section.
- (1) Following approval of the site-specific test plan, the owner or operator shall conduct a performance test for each process or control device to either measure simultaneously the mass flows of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl (and Cl2 for hydrochloric acid regeneration plants) in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).
- (2) Compliance with the applicable concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs or by the average of any three of four consecutive runs. Each run shall be conducted under conditions representative of normal process operations.
- (3) Compliance is achieved if either the average collection efficiency as determined by the HCl mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency standard, or the average measured concentration of HCl or Cl2 exiting the process or the emission control device is less than or equal to the applicable emission concentration standard.
- (b) Establishment of scrubber operating parameters. I didn't see any mention of a scrubber in the list of sources. During the performance test for each emission control device, the owner or operator using a wet scrubber to achieve compliance shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, for scrubbers that operate with recirculation, the minimum recirculation water flow rate. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The owner or operator shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency per paragraph (a)(2) of this section. An owner or operator may conduct multiple

performance tests to establish alternative compliant operating parameter values. Also, an owner or operator may reestablish compliant operating parameter values as part of any performance test that is conducted subsequent to the initial test or tests.

- (d) **Test methods**. (1) The following test methods in appendix A of 40 CFR part 60 shall be used to determine compliance under §63.1157(a), §63.1157(b), §63.1158(a), and §63.1158(b) of this subpart:
- (i) Method 1, to determine the number and location of sampling points, with the exception that no traverse point shall be within one inch of the stack or duct wall;
- (ii)Method 2, to determine gas velocity and volumetric flow rate;
- (iii) Method 3, to determine the molecular weight of the stack gas;
- (iv) Method 4, to determine the moisture content of the stack gas; and
- (v) Method 26A, "Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method," to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere, and also to determine the concentration of Cl2 discharged to the atmosphere from acid regeneration plants. If compliance with collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (30 dry standard cubic feet). The concentrations of HCl and Cl2 shall be calculated for each run as follows:

CHCI(ppmv) = 0.659 CHCI(mg/dscm),

and CC12(ppmv) = 0.339 CC12(mg/dscm),

where C(ppmv) is concentration in ppmv and C(mg/dscm) is concentration in milligrams per dry standard cubic meter as calculated by the procedure given in Method 26A.

- (2) The owner or operator may use equivalent alternative measurement methods approved by the Administrator.
- D. None.
- E. None.

Monitoring Requirements:

- The Permittee shall visually inspect the exhaust gases from all control equipment [scrubber and baghouse] stack for visible emissions once a week for an 18-minute period and shall record the results of each observation. If no visible emissions are observed in six consecutive months for the exhaust stack of any emission unit, the Permittee may decrease the frequency of visual inspection from once weekly to once monthly for the exhaust stack of that emission unit. If visible emissions are observed during any monthly visual inspection, the Permittee must resume visible inspection of the exhaust stack of that emission unit once a week basis and maintain that schedule until no visible emissions are observed in six consecutive months. If no visible emissions are observed during the once a month visible inspection for the exhaust stack of any emission unit, the Permittee may decrease the frequency of visual inspection from monthly to semi-annually for the exhaust stack of that emission unit. If visible emissions are observed during any semi-annual visible inspection, the Permittee must resume visible inspection of the exhaust stack of that emission unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly inspections. [Reference: COMAR 26.11.03.06C]
- B. **For Scrubber_and baghouse_only**: The Permittee shall develop and maintain a preventive maintenance plan for the scrubber, <u>super heaters and reheat furnace</u> What ??that describes the maintenance activity and time schedule for completing each

activity. The Permittee shall perform maintenance activities within the time frames established in the plan and shall maintain a log with records of the dates and description of the maintenance that was performed. [Reference: COMAR 26.11.03.06C]

For Mills and Oilers only: The Permittee shall prepare and maintain a plan that contains an explanation of the reasonable precautions that will be used to prevent particulate matter from becoming airborne. Once a month, the Permittee shall perform an inspection of the operations to verify that the reasonable precautions are being implemented. The Permittee shall reevaluate the effectiveness of the reasonable precautions plan annually. [Reference: COMAR 26.11.03.06C]. The Permittee shall monitor the pressure drop across the mist eliminators and maintain such records. [Reference: MDE PTC #03-6-2371M, issued 8/12/1999].

- C. For Rolling and Coating operations???: None.
 - For Steel Pickling Operation: §63.1162 Monitoring requirements.
 - (a) The owner or operator of a new, reconstructed, or existing steel pickling facility or acid regeneration plant subject to this subpart shall:
 - (1) Conduct performance tests to measure the HCl mass flows at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in §63.1161 of this subpart. Performance tests shall be conducted either annually or according to an alternative schedule that is approved by the applicable permitting authority, but no less frequently than every 2½ years or twice per title V permit term. If any performance test shows that the HCl emission limitation is being exceeded, then the owner or operator is in violation of the emission limit. (2) In addition to conducting performance tests, if a wet scrubber is used as the emission control device, install, operate, and maintain systems for the measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the performance test or tests will require initiation of corrective action as specified by the maintenance requirements in §63.1160(b)(2) of this subpart.
- D. The Permittee shall maintain good operating practices as recommended by the equipment vendor to minimize NO_x emissions. [Reference: COMAR 26.11.09.08J(1)] The Permittee shall prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation. (Note: COMAR 26.11.09.08B(5)(a) states that "for the purpose of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation)". [Reference: COMAR 26.11.09.08J(2)]
- E. None. The emission limits need to have periodic monitoring.

Record Keeping Requirements:

Note: All records must be maintained for a period of 5 years. [Reference: COMAR 26.11.03.06C(5)(g)]

- A. The Permittee shall maintain on site a log of the dates and results of visible emissions observations for a period of at least five years. [Reference: COMAR 26.11.03.06C].
- B. For Scrubber and baghouse only: The Permittee shall maintain a copy of the

preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain records of the baghouse malfunctions and the corrective actions taken to bring into proper operation.

[Reference: COMAR 26.11.03.06C].

For Mills and Oilers only: The Permittee shall maintain the plan of reasonable precautions and keep records of dates and results of visual observation of the operations. These records shall be kept on site for a period of at least five years. [Reference: COMAR 26.11.03.06C]. The Permittee shall record the pressure drop across the mist eliminator at least once per operating day. [Reference: MDE PTC #03-6-2371 M, issued].

C. **For Rolling and Coating Operations**: The Permittee shall keep MSDS or other data sheets, that indicates the vapor pressure of the rolling oils and rust preventative oils that are used at the hot rolling mill. These records shall be kept on site for at least five (5) years and shall be made available to the Department upon request. **[Reference: COMAR 26.11.03.06C].**

For Steel Pickling Operation §63.1165 - Record keeping requirements.

- (a) <u>General record keeping requirements</u>. As required by §63.10(b)(2) of subpart A of this part, the owner or operator shall maintain records for 5 years from the date of each record of:
- (1) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
- (2) The occurrence and duration of each malfunction of the air pollution control equipment;
- (3) All maintenance performed on the air pollution control equipment;
- (4) Actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;
- (5) All information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form (see §63.10(b)(2)(v) of subpart A of this part);
- (6) All required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;
- (7) All results of initial or subsequent performance tests;
- (8) If the owner or operator has been granted a waiver from record keeping or reporting requirements under §63.10(f) of subpart A of this part, any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements;
- (9) If the owner or operator has been granted a waiver from the initial performance test under §63.7(h) of subpart A of this part, a copy of the full request and the Administrator's approval or disapproval;
- (10) All documentation supporting initial notifications and notifications of compliance status required by §63.9 of subpart A of this part; and
- (11) Records of any applicability determination, including supporting analyses.

- (b) Subpart CCC records. (1) In addition to the general records required by paragraph
- (a) of this section, the owner or operator shall maintain records for 5 years from the date of each record of:
- (i) Scrubber makeup water flow rate and recirculation water flow rate if a wet scrubber is used:
- (ii)Calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and
- (iii) Each maintenance inspection and repair, replacement, or other corrective action.
- (2) The owner or operator of an acid regeneration plant shall also maintain records for 5 years from the date of each record of process off gas temperature and parameters that determine proportion of excess air.
- (3) The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of this subpart. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by the Administrator for a period of 5 years after each revision to the plan.
- (c) <u>Recent records</u>. General records and subpart CCC records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.
- D. The Permittee shall maintain the written in-house operator-training program and operator training attendance records for each operator at the site for at least 2 years. The Permittee shall make available to the Department, upon request, the written inhouse operator-training program and records of the operator training attendance. [Reference: COMAR 26.11.09.08J(2)]
- E. Operational Limit.

The Permittee shall record the following parameters at least once per operating day: (a) tandem mill scrubber – pressure drop; (b) skin pass mill scrubber – pressure drop; and (c) scale breaker baghouse – pressure drop."

[Reference: MDE PTC 03-6-2371M, Part F(3), issued August 12, 1999]

The Permittee shall maintain records the rolling oils used in the Tandem Mill, Skin pass Mill and oilers to demonstrate compliance with the operational limits.

[Reference: MDE PTC 03-6-2371M, Part F(5), issued August 12, 1999] What about the emission limits??? How do they demonstrate compliance???

Reporting Requirements:

- A. The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations." The Permittee shall also make the records available to the Department upon request. [Reference: COMAR 26.11.03.06C].
- B. **For Scrubber and baghouse_only**: The Permittee shall submit the maintenance plan and records of maintenance activities to the Department upon request. **[Reference: COMAR 26.11.03.06C].**

For Mills and Oilers only: The Permittee shall submit the plan and records of visual observation of the operations to the Department upon request. [**Reference: COMAR 26.11.03.06C**]

C. §63.1164 - Reporting requirements.

- (a) Reporting results of performance tests. As required by §63.10(d)(2) of subpart A of this part, the owner or operator of an affected source shall report the results of any performance test as part of the notification of compliance status required in §63.1163 of this subpart.
- (b) <u>Progress reports</u>. The owner or operator of an affected source who is required to submit progress reports under §63.6(i) of subpart A of this part shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.
- (c) <u>Periodic startup</u>, shutdown, and <u>malfunction reports</u>. Section 63.6(e) of subpart A of this part requires the owner or operator of an affected source to operate and maintain each affected emission source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all times, including during any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.
- (1) <u>Plan</u>. As required by §63.6(e)(3) of subpart A of this part, the owner or operator shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard.
- (2) Reports. As required by §63.10(d)(5)(i) of subpart A of this part, if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the owner or operator shall state such information in a semiannual report. The report, to be certified by the owner or operator or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half; and
- (3) <u>Immediate Reports</u>. Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall comply with all requirements of §63.10(d)(5)(ii) of subpart A of this part.
- D. None.
- E. None.

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

11 <u>Emissions Unit Number(s) – Tin Mill Product [6-0949]</u>

TM3PD: Descaling.
TM3POR: Oiling/Recoil.
TM3PSD: Steam Dry.

TM3PMH: Tin Mill #3 Pickler. Building Fugitives.

TM3P2,3,5: Tin Mill #3 Pickler, Pickling Tanks with (4) scrubbers. [Three operating and one

spare]

TM48TMMH: 48" Tandem Mill with two mist eliminators.

TM6SPMMH: No. 6 Skin Pass Mill with Baghouse (TM6SPM) [Baghouse exhausts indoors]

TM3DM: No. 3 Duo Mill with fume-exhaust system. TM1HLEO: No. 1 Tin Plate Line Electrostatic Oiler. TM2HLEO: No. 2 Tin Plate Line Electrostatic Oiler. TM8CLEO: No. 8 Chrome Line Electrostatic Oiler TM6WSD: No. 6 Washer Steam Drier and scrubber.

TM5CASD: Annealing Steam Drier.

TM5CPO: No. 5 Coil Preparation Line Oiler

TM5CAAF: Continuous Annealing Furnace with caustic cleaning section and scrubber.

TM1HLS1/2: No. 1 Tin Plate Line with Scrubber No. 1 and 2. TM1HLS3/4: No. 1 Tin Plate Line with Scrubber No. 3 and 4. TM2HLS4&5: No. 2 Tin Plate Line with Scrubber No. 4 and 5. TM2HLS1 2: No. 2 Tin Plate Line with Scrubber No. 1 2 and 3.

TM2HLS1,2,3: No. 2 Tin Plate Line with Scrubber Nos. 1,2 and 3.

TM8CLS1: No. 2 No. 8 Chrome Line with Scrubber No. 1; Pickler and cleaner. Is the same as No., 1 Scrubber above??

TM8CLS2:No. 2 No. 8 Chrome Line with Scrubber No. 2; Plating and chem. Treat box annealing (located in cold mill).

How many scrubbers are there?

Applicable Standards/Limits:

A. Control of Visible Emissions

For Scrubbers What about the baghouse? COMAR 26.11.10.03A(1) – Visible Emissions

"A person may not cause or permit the discharge of confined emissions from any installation, other than water in an uncombined form, which is visible to human observers." **COMAR 26.11.10.03A(2)** – Exceptions. "Sections A(1) of this regulation does not apply to the following: (e) Confined emissions resulting from start-ups, process modifications or adjustments, or occasional cleaning of control equipment if: (i) The visible emissions are not greater than 40 percent opacity; and (ii) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

B. Control of Particulate Matter

For Scrubbers What about the baghouse? COMAR 26.11.10.04A – Confined Emissions

"A person may not cause or permit the discharge of confined emissions of particulate matter in excess of 0.03 gr/scfd (68.7 mf/dscm) from any iron or steel production installation."

For Oilers and Mills only

COMAR 26.11.10.04B(1) – Particulate Matter Fugitive Emissions

"A person may not cause or permit the discharge of fugitive emissions of particulate matter from an iron and steel production installation unless reasonable control methods are employed to minimize emissions. These methods include the use of hoods and control equipment to capture emissions, other control techniques, and process restrictions"

C. Control of VOC Emissions

COMAR 26.11.10.06(B) - Control of VOC Emissions from Installations That Use Rolling Oils or Rust Preventive Oils

"The following installations may not use oils or rust preventive oils that have a vapor pressure greater than 1 millimeter of mercury at 25 Celsius: (2) Cold rolling operations"

D. Control of NO_x Emissions

For TM5CAAF - Continuous Annealing Furnace only.

COMAR 26.11.09.08J - Requirements for Industrial Furnaces and Other Miscellaneous

Installations that Cause Emissions of NO_x . "A person who owns or operates any installation other than fuel-burning equipment that causes NO_x emissions shall:

- Maintain good operating practices as recommended by the equipment vendor to minimize NO_x emissions;
- 2) Prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation;
- 3) Maintain and make available to the Department, upon request, the written in-house operator training program;
- 4) Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year; and
- 5) Maintain operator training attendance records for each operator at the site for at least 2 years and make these records available to the Department upon request."

E. Operational Limit

The following applies to the No. 8 Chrome Line with Scrubber 1 and Scrubber 2 (Emissions Units TM8CLS1 and TM8CLS2)

The plan specifies that spent pickle liquor will be added to the scrubber and that scrubber water and pickle liquor will be monitored. [Reference: O&M Plan to MDE 4/2/93].

Testing Requirements:

- A. None.
- B. None.
- C. None. NONE???
- D. None.
- E. None.

Monitoring Requirements:

- The Permittee shall visually inspect the exhaust gases from all control equipment Α. [scrubbers baghouse?] stacks for visible emissions once a week for an 18-minute period and shall record the results of each observation. If no visible emissions are observed in six consecutive months for the exhaust stack of any emission unit, the Permittee may decrease the frequency of visual inspection from once weekly to once monthly for the exhaust stack of that emission unit. If visible emissions are observed during any monthly visual inspection, the Permittee must resume visible inspection of the exhaust stack of that emission unit once a week basis and maintain that schedule until no visible emissions are observed in six consecutive months. If no visible emissions are observed during the once a month visible inspection for the exhaust stack of any emission unit, the Permittee may decrease the frequency of visual inspection from monthly to semi-annually for the exhaust stack of that emission unit. If visible emissions are observed during any semi-annual visible inspection, the Permittee must resume visible inspection of the exhaust stack of that emission unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly inspections. [Reference: COMAR 26.11.03.06C]
- B. **For Scrubbers only**: The Permittee shall develop and maintain a preventive maintenance plan for the scrubber, **super heaters and reheat furnace** that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frames established in the plan and shall maintain a log with records of the dates and description of the maintenance that

was performed. [Reference: COMAR 26.11.03.06C]

For Mills and Oilers only: The Permittee shall prepare and maintain a plan that contains an explanation of the reasonable precautions that will be used to prevent particulate matter from becoming airborne. Once a month, the Permittee shall perform an inspection of the operations to verify that the reasonable precautions are being implemented. The Permittee shall reevaluate the effectiveness of the reasonable precautions plan annually. [Reference: COMAR 26.11.03.06C]. By when....isn't it already done, etc

- C. None.
- D. The Permittee shall maintain good operating practices as recommended by the equipment vendor to minimize NO_x emissions. [Reference: COMAR 26.11.09.08J(1)]. The Permittee shall prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation (Note: COMAR 26.11.09.08B(5)(a) states that "for the purpose of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation)." [Reference: COMAR 26.11.09.08J(2)] By when, etc
- E. Operational Standard

The Permittee shall monitor the spent pickle liquor carrier water and pickle liquor, and record at least once per operating day the water and pickle liquor flow to each of the wet scrubbers at the No. 8 Chrome Line. These records shall be kept onsite for at least five years and made available to the Department upon request. [Reference: O&M Plan to MDE (4/2/93)]

Record Keeping Requirements:

<u>Note</u>: All records must be maintained for a period of 5 years. [Reference: COMAR 26.11.03.06C(5)(g)]

- A. The Permittee shall maintain on site a log of the dates and results of visible emissions observations for a period of at least five years. [Reference: COMAR 26.11.03.06C].
- B. For Scrubbers only: The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain records of the baghouse malfunctions and the corrective actions taken to bring into proper operation. [Reference: COMAR 26.11.03.06C].

For Mills and Oilers only: The Permittee shall maintain the plan of reasonable precautions and keep records of dates and results of visual observation of the operations. These records shall be kept on site for a period of at least five years. [Reference: COMAR 26.11.03.06C].

- C. The Permittee shall keep MSDS or other data sheets, that indicates the vapor pressure of the rolling oils and rust preventative oils that are used at the hot rolling mill. These records shall be kept on site for at least five (5) years and shall be made available to the Department upon request. [Reference: COMAR 26.11.03.06C].
- D. The Permittee shall maintain the written in-house operator-training program and operator training attendance records for each operator at the site for at least 2 years. The Permittee shall make available to the Department, upon request, the written in-

house operator-training program and records of operator training attendance. [Reference: COMAR 26.11.09.08J(2)]

E. Operational Standard

The Permittee shall record at least once per operating day the water flow to each of the wet scrubbers. These records shall be kept onsite for at least five years and made available to the Department upon request. [Reference: COMAR 26.11.03.06C].

Reporting Requirements:

- A. The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations." The Permittee shall also make the records available to the Department upon request. [Reference: COMAR 26.11.03.06C].
- B. **For Scrubbers only**: The Permittee shall submit the maintenance plan and records of maintenance activities to the Department upon request. **[Reference: COMAR 26.11.03.06C].**

For Mills and Oilers only: The Permittee shall submit the plan and records of visual observation of the operations to the Department upon request. [**Reference: COMAR 26.11.03.06C**]

- C. None.
- D. None
- E. Operational Standard: None.

12 Emissions Unit Number(s) – Power and Utilities: Pennwood Power Station

PUPB1: 723 MMBtu/hr Pennwood Boiler No. 1 – installed in 1949 [5-0491]. **PUPB2:** 723 MMBtu/hr Pennwood Boiler No. 2 – installed in 1949 [5-0492]. **PUPB3:** 812 MMBtu/hr Pennwood Boiler No. 3 – installed in 1954 [5-0414]. **PUPB4:** 1,085 MMBtu/hr Pennwood Boiler No. 4 – installed in 1957 [5-0415].

Applicable Standards/Limits:

A. Control of Visible Emissions

COMAR 26.11.09.05A(2) - Visible Emissions Fuel Burning Equipment.

"In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers."

COMAR 26.11.09.05A(3) - Exceptions. "Section A(1) and A(2) of this regulation does not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if:

- (a) The visible emissions are not greater than 40 percent opacity; and
- (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period."

B. Control of Sulfur Oxide Emissions

COMAR 26.11.09.07A(2) - Control of Sulfur Oxides From Fuel Burning Equipment. "A

[&]quot;A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: In Areas III and IV:

- (a) All solid fuels, 1.0 percent;
- (b) Distillate fuel oils, 0.3 percent;
- (c) Residual fuel oils, 1.0 percent.

C. Control of NO_x Emissions

COMAR 26.11.09.08 - Control of NO_x Emissions for Major Stationary Sources,

(B) General Requirements and Conditions

"(1)(c) Emission Standards in Pounds of NOx per Million Btu of heat input"

Fuel Ta	angential-Fired	Wall-Fired
Gas only	0.20	0.20
Gas/Oil	0.25	0.25
Coal (dry bottom)	0.38	0.38
Coal (wet bottom)	1.00	1.00

- (2) Demonstration of Compliance
- "(a) A person subject to a NO_x emission standard in this regulation shall demonstrate compliance as follows: (i) For installations equipped with a CEM, compliance with the NOx emissions standards in this regulation shall be established using CEM data.
- (b) CEMs shall be certified in accordance with 40 CFR Part 60, Appendix B, or Part 75, Appendix A.
- (c) CEMs shall meet the quality assurance criteria in 40 CFR part 60, Appendix F, or for sources subject to Title IV of the Clean Air Act (Acid Rain), the quality assurance criteria in 40 CFR Part 75, Appendix B.
- (d) Except as otherwise established by the Department and approved by the EPA, for a person who establishes compliance with the NOx emissions standards in this regulation using a CEM, compliance shall be determined as 30-day rolling averages.
- (e) For a person who establishes compliance using a stack test, compliance shall be determined as averages for the stack test duration."
- (5) Operator Training.
- (a) "For purpose of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.
- (b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department."

Testing Requirements:

- A. Certification testing shall be repeated when the Department determines that the CEM data may be invalid because of component replacement or other conditions that may affect the quality of generated data. [Reference: COMAR 26.11.01.10G(2)(c)]
- B. None.
- C. The Permittee shall conduct NO_x stack testing on the boilers at least once during the life of the permit to show compliance with the emission limits. The Permittee shall submit a stack test protocol to the Department for approval 30 days prior to the proposed stack test date. [Reference: COMAR 26.11.09.08B(2)(e)]

Monitoring Requirements:

- A. The Permittee shall continuously monitor opacity of the stack gases using a continuous opacity monitor that meets the quality assurance criteria of the Department's Air Management Administration Technical Memorandum 90-01, "Continuous Emission Monitoring (CEM) Policies and Procedures" (October 1990), which is incorporated, by reference. [Reference: COMAR 26.11.01.10]. The Permittee shall perform EPA Method 9 observations at least once per day for 18-minute when the continuous opacity monitors are out of service. [Reference: COMAR 26.11.03.06C]
- B. The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of fuel oil [Reference: COMAR 26.11.03.06C].
- C. None. This is unsufficient to qualify as periodic monitoring.

Record Keeping Requirements:

NOTE: All records must be maintained for a period of 5 years. [Reference: COMAR 26.11.03.06C (5)(g)].

- A. The Permittee shall maintain all records necessary to comply with the CEM data reporting requirements of COMAR 26.11.01.10G(2). [Reference: COMAR 26.11.01.10G(2)].
- B. The Permittee shall maintain fuel supplier certifications stating that the fuel oil is in compliance with this regulation. [Reference: COMAR 26.11.09.07C].
- C. The Permittee shall maintain a written in-house operator-training program and operator training attendance records for each operator at the site for at least 2 years. The Permittee shall make available to the Department, upon written, the written in-house operator-training program and records if operator training attendance. [Reference: COMAR 26.11.09.08J(2)]

Reporting Requirements:

- A. The Permittee shall submit a quarterly summary report and EPA Method 9 Observations to the Department not later than 30 days following each calendar quarter. The report shall be in a format approved by the Department, and shall include the following:
 - (i) The cause, time periods, and magnitude of all emissions which exceed the applicable emission standards:
 - (ii) The source downtime including the time and date of the beginning and end of each downtime period and whether the source downtime was planned or unplanned;
 - (iii) The time periods and cause of all CEM downtime including records of any repairs, adjustments, or maintenance that may affect the validity of emission data;
 - (iv) Quarterly totals of excess emissions, installation downtime, and CEM downtime during the calendar quarter;
 - (v) Quarterly quality assurance activities; and
 - (vi) Daily calibration activities that include reference values, actual values, absolute or percent of span differences, and drift status; and
 - (vii) Other information required by the Department that is determined to be necessary to evaluate the data, to ensure that compliance is achieved, or to determine the applicability of this regulation." [Reference: COMAR 26.11.01.10G(2)]

CEM System Downtime Reporting Requirement: The Permittee shall report all system

downtime that lasts or is expected to last more than 24 hours to the Department by telephone before 10 a.m. of the first regular business day following the breakdown. The system breakdown report shall include the reason, if known, for the breakdown and the estimated period of time that the CEM will be down. The owner or operator of the CEM shall notify the Department by telephone when an out-of-service CEM is back in operation and producing valid data. [Reference: COMAR 26.11.01.10G(1)]

- B. The Permittee shall report fuel supplier certifications to the Department upon request [Reference: COMAR 26.11.09.07C].
- C. The Permittee shall report the results of the stack test to the Department 45 days after the performance testing. [Reference: COMAR 26.11.03.06C]

12a Emissions Unit Number(s) – Power and Utilities Cont'd - Utilities

PUCRPLHB: Chrome Reduction Plant Lime Silo with Baghouse [9-0949] **PUHCTPLSB:** Humphrys Creek WWTP with 2 Lime Silo Baghouses and NASH scrubber [9-0948]

Applicable Standards/Limits:

A. Control of Visible Emissions

COMAR 26.11.10.03A(1) - Visible Emissions

"A person may not cause or permit the discharge of emissions from any installation, other than water in an uncombined form, which is visible to human observers."

<u>Exceptions:</u> COMAR 26.11.10.03A(2)(e)-Section A(1) of this regulation does not apply to the following:

- (c)"Confined emissions resulting from start-ups, process modifications or adjustments, or occasional cleaning of control equipment if:
 - (i)The visible emissions are not greater than 40 percent opacity; and
 - (ii)The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

B. Control of Particulate Matter

COMAR 26.11.10.04A - Particulate Matter Confined Emissions

"A person may not cause or permit the discharge of confined emissions of particulate matter in excess of 0.03 gr/scfd (68.7 mg/dscm) from any iron or steel production installation."

Testing Requirements:

- A. None.
- B. None.

Monitoring Requirements:

A. The Permittee shall conduct a monthly one-minute visual observation of the baghouse exhaust. The visual observation must be conducted while the silos and baghouses are

[&]quot;A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

in operation. If no visible emissions are observed in six consecutive monthly observations from the baghouse exhaust, the Permittee may decrease the frequency of visual observations from monthly to quarterly for the baghouse exhaust. If visible emissions are observed during any quarterly visual observation, the Permittee must resume the observation of the baghouse exhaust on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly visual observations. If visible emissions are observed during any observation, the Permittee must inspect the baghouse for cause of visible emissions and perform necessary adjustments or repairs within 24-hours or prior to operating the silos. If visible emissions have not been eliminated, the Permittee shall perform daily 18-minute visual observation for opacity in accordance with EPA Reference Method 9 when operating the silos.

[Reference: COMAR 26.11.03.06C]

B. The Permittee shall develop and maintain a preventative maintenance plan for the baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates that maintenance was performed. [Reference: COMAR 26.11.03.06C]

Record Keeping Requirements:

<u>NOTE</u>: All records must be maintained for a period of 5 years. [Reference: COMAR 26.11.03.06C (5)(g)].

- A. The Permittee shall maintain on site a log of the dates and results of visible emissions observations for a period of at least 5 years. [Reference: COMAR 26.11.03.06C]
- B. The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain records of baghouse malfunctions and the corrective actions taken to bring it into proper operation. [Reference: COMAR 26.11.03.06C]

Reporting Requirements:

- A. The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" [Reference: COMAR 26.11.03.06C].
- B. The Permittee shall submit the maintenance plan and record of maintenance activities to the Department upon request. [Reference: COMAR 26.11.03.06C]

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

13 Emissions Unit Number(s) – Mobile Yard

MEYL: Greys Landfill [6-0940].

CPMEYL: Coke Point Landfill [6-0940].
MEYRTP: Paved Roads [9-1027].
CPMEYL: Unpaved Roads [9-1027].

Applicable Standards/Limits:

Control of Particulate Matter

COMAR 26.11.06.03D - Particulate Matter from Materials Handling and Construction

"A person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

Testing Requirements:

None.

Monitoring Requirements:

The Permittee shall follow the plan submitted to the Department on July 29, 1994, and subsequent amendments, for controlling fugitive emissions from interior plant roads. [Reference: Periodic Monitoring - COMAR 26.11.03.06C].

Record Keeping Requirements:

The Permittee shall maintain records of sweeper/water truck schedules. These records must be kept onsite and shall make them available to the Department upon request. [Reference: Periodic Monitoring - COMAR 26.11.03.06C].

Reporting Requirements:

The Permittee shall submit to the Department an updated plan annually by April 1.[Reference: Periodic Monitoring - COMAR 26.11.03.06C].

13a Emissions Unit Number(s) – Mobile Yard Cont'd

STPASTTD69: Gasoline Storage Tank. **STPSUSTPG:** Gasoline Dispensing Facility.

One 12,000-gallon underground storage tank for dispensing gasoline. Control equipment consists of Stage I and II vapor recovery systems.

Applicable Standards/Limits:

COMAR 26.11.13.04C - Small Storage Tanks.

- (1) "Applicability. This section applies to a person who owns or operates:
 - (a) A gasoline storage tank that has a tank capacity greater than 2,000 gallons but less than 40,000 gallons; or
 - (b) A gasoline tank truck used to transfer gasoline into a storage tank that is listed in

[&]quot;A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

Sec. C(1)(a) of this regulation.

(2) <u>Stage I Vapor Recovery</u>. An owner or operator of a gasoline tank truck or an owner or operator of a stationary storage tank subject to this regulation may not cause or permit gasoline to be loaded into a stationary tank unless the loading system is equipped with a vapor balance line that is properly installed, maintained and used."

Operational Limitations

COMAR 26.11.24.06-Training Requirements for Operation and Maintenance of Approved Systems.

- A. "General. An operator shall ensure that:
 - 1) At least one employee at each facility subject to this regulation is trained in accordance with the requirements of Sec. B of this regulation; and
 - 2) The trained employee assists in the training of each of the other employees at that facility who are involved in the operation or maintenance of the approved system.
- B. Approved Training Course Contents and Duration.
 - (1) An approved training course shall contain, at a minimum, a discussion of the following:
 - (a)Purposes and effects of Stage II vapor recovery;
 - (b)Stage II vapor recovery equipment design, function, operation and maintenance;
 - (c)Daily inspection requirements and development and maintenance of records and files; and
 - (d)Equipment warranties and spare parts.
 - The approved training course shall be of a duration sufficient to properly train persons in the requirements of this chapter."

COMAR 26.11.24.08 - Instructional Signs

- A. "An operator who is subject to this chapter shall place instructional signs in conspicuous locations at each gasoline dispenser.
- B. The instructional signs shall include:
 - (1) Instructions, with illustrations, on how to insert the nozzle, dispensing gasoline, and how to remove the nozzle;
 - 3) A warning against attempts to continue refueling after automatic shutoff of the gasoline (that is, topping off); and
 - 4) The Department's toll-free telephone number, which may be used for complaints or comments concerning the use of the Stage II vapor recovery systems."

Testing Requirements:

COMAR 26.11.24.04 - Testing Requirements.

- A. "Except as provided in Sec. F and G of this regulation, an owner subject to this chapter shall perform leak, liquid blockage, and dynamic back pressure test on each Stage II vapor recovery system in accordance with Methods 1011 and 1012 of the Department's Technical Memorandum 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January 1991), which is incorporated by reference in COMAR 26.11.01.04C.
- B. The leak and liquid blockage tests required in Sec. A of this regulation shall be performed on each approved system before the gasoline dispensing facility is initially used to refuel motor vehicles, or by the applicable dates in Regulation .03 of this chapter, whichever occurs later. The test method for dynamic backpressure shall be used for the liquid blockage test in accordance with Method 1012 set forth in Sec. A of

this regulation.

- C. An owner subject to this chapter shall repeat the:
 - (1) Dynamic back pressure test at least once every 12 months; and
 - (2) Leak test at least once every 5 years and upon replacement of 75 percent or more of an approved system.
- D. An owner shall test the automatic shutoff and flow prohibiting mechanisms upon installation and at least monthly after to ensure that they operate properly.
- E. If a gasoline dispensing facility fails any test required by this chapter, the owner shall notify the Department of the failure in writing within 5 working days after the test and before retesting.
- F. Alternative test methods approved by CARB may be used in place of the test methods specified in Sec. A of this regulation, if the alternative test methods are approved by the U.S. EPA as a revision to the SIP, which is Maryland's plan for meeting National Ambient Air Quality Standards.
- G. Test methods and the frequency of testing required by this regulation may be modified for vapor assist systems, if the test methods and testing frequency are approved by the Department and the EPA."

Monitoring Requirements:

COMAR 26.11.24.05 - Inspection Requirements.

- A. "An operator subject to this chapter shall ensure that each approved system is inspected at least once each day of operation to verify that it is working properly.
- B. Except as provided in Sec. C of this regulation, the Department shall consider an operator of a gasoline dispensing facility to be in violation of Regulation .03E of this chapter during periods of time when defective equipment at the facility is placed in operation.
- C. The operator is not in violation of Regulation .03E of this chapter during any period of time that the operator establishes, to the satisfaction of the Department, that nozzles associated with defective equipment were tagged out of service and that no nozzle associated with the defective equipment was actually used.
- D. For any defective equipment identified by the Department, the operator shall effect necessary repairs before placing the equipment in service, and shall inform the Department by telephone within 72 hours after the repair or replacement of the defective equipment has been effected."

Record Keeping Requirements:

COMAR 26.11.24.07 - <u>Recording Keeping and Reporting Requirements.</u>

- A. "An operator subject to this chapter shall create and maintain a record file at the facility or at an alternative site approved by the Department.
- B. The record file shall contain copies of all test reports, permits, violation notices, correspondence with the Department, equipment maintenance records, training records,

and other information pertinent to the requirements of this chapter. Verification of training shall be maintained in the record file. Equipment maintenance records shall be maintained for at least 2 years. Test records shall be maintained for at least 5 years.

- C. The equipment maintenance records shall include:
 - (1) The date on which defective equipment was found, a description of each defect, a description of the corrective action and the date on which the defect was corrected, and the probable cause of the defect;
 - (2) If parts are replaced, the location within the approved system of the part, the part number, and assurance that the replacement part does not degrade the efficiency of the system; and
 - (3) (3)Inspection reports and any other information relating to maintenance or care of the system."

Reporting Requirements:

If any test is failed, the Permittee shall notify the Department in writing within 5 days after the test and before retesting. [Reference: COMAR 26.11.24.04E]

The Permittee shall submit written notification to the Department within 5 days of the incident, unless otherwise specified by the Permit. [Reference: COMAR 26.11.24.04E]

"A permit shield shall cover the applicable requirements identified for the emission unit(s) listed in the table above."

Subpart FFFFF of Part 63. – Applicability of General Provisions to Subpart FFFFF

[As required in §63.7850, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table]

Citation	Subject	Applies to Subpart FFFFF	Explanation
§63.1	Applicability	Yes	
§63.2	Definitions	Yes	
§63.3	Units and Abbreviations	Yes	
§63.4	Prohibited Activities	Yes	
§63.5	Construction/Reconstruction	Yes	
§63.6(a), (b), (c), (d), (e), (f), (g), (h)(2)(ii)-(h)(9)	Compliance with Standards and Maintenance Requirements	Yes	
§63.7(a)(3), (b), (c)- (h)	Performance Testing Requirements	Yes	
\$63.8(a)(1)-(a)(3), (b), (c)(1)-(3), (c)(4)(i)-(e), (c)(7)- (8), (f)(1)-(5), (g)(1)- (4)	Monitoring Requirements	Yes	CMS requirements in §63.8(c)(4) (i)-(ii), (c)(5) and (6), (d) and (e) apply only to COMS for electrostatic precipitators
§63.9	Notification Requirements	Yes	Additional notifications for CMS in §63.9(g)

Citation	Subject	Applies to Subpart FFFFF	Explanation
			apply to COMS for electrostatic precipitators
§63.10(a), (b)(1)- (2)(xii), (b)(2)(xiv), (b)(3), (c)(1)-(6), (c)(9)-(15), (d), (e)(1)-(2), (e)(4), (f)	Record keeping and Reporting Requirements	Yes	Additional records for CMS in §63.10(c) (1)-(6), (9)-(15), and reports in §63.10(d)(1)-(2) apply to COMS for electrostatic precipitators.
§63.12	State Authority and Delegations	Yes	
§63.13-§63.15	Addresses, Incorporations by Reference, Availability of Information	Yes	

SECTION V INSIGNIFICANT ACTIVITIES

This section contains a list of the insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. <u>≈12</u> Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

These *units* are subject to the following requirements:

- (A) <u>COMAR 26.11.09.05B(2)</u>, <u>Emissions During Idle Mode</u>: The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.
- (B) COMAR 26.11.09.05B(3), Emissions During Operating Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.
- (C) Exceptions:
 - (i)COMAR 26.11.09.05B(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.
 - (ii)COMAR 26.11.09.05B(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
 - (a) Engines that are idled continuously when not in service: 30 minutes
 - (b) all other engines: 15 minutes.
 - (iii)COMAR 26.11.09.05B(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.
- (2) $\sqrt{}$ Space heaters utilizing direct heat transfer and used solely for comfort heat;
- (3) ____ Water cooling towers and water cooling ponds unless used for evaporative cooling of water from barometric jets or barometric condensers, or used in conjunction with an installation requiring a permit to operate;
- (4) No. <u>≈200</u> Unheated VOC dispensing containers or unheated VOC rinsing containers of 60 gallons (227 liters) capacity or less;

These <u>units</u>] is/are subject to COMAR 26.11.19.09D, which requires that the Permittee control emissions of volatile organic compounds (VOC) from cold degreasing operations by meeting the following requirements:

- (a) COMAR 26.11.19.09D(2)(b), which establishes that the Permittee shall not use any VOC degreasing material that exceeds a vapor pressure of 1 mm Hg at 20°C;
- (b) COMAR 26.11.19.09D(3)(a—d), which requires that the Permittee implement good operating practices designed to minimize spills and evaporation of VOC degreasing material. These practices, which shall

(a)

(b)

be established in writing and displayed such that they are clearly visible to operators, shall include covers (including water covers), lids, or other methods of minimizing evaporative losses, and reducing the time and frequency during which parts are cleaned;

(c) COMAR 26.11.19.09D(4), which prohibits the use of any halogenated VOC for cold degreasing.

The Permittee shall maintain on site for at least five (5) years, and shall make available to the Department upon request, the following records of operating data:

Monthly records of the total VOC degreasing materials used; and

Written descriptions of good operating practices designed to minimize

spills and evaporation of VOC degreasing materials. (5) √ Confection cookers where the products are edible and intended for human consumption; Equipment for drilling, carving, cutting, routing, turning, sawing, planing, spindle sanding, or disc sanding of wood or wood products; (7) √ Brazing, soldering, or welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals and not directly related to plant maintenance, upkeep and repair or maintenance shop activities; (8) √ Equipment for washing or drying products fabricated from metal or glass, provided that no VOC is used in the process and that no oil or solid fuel is burned; (9) Containers, reservoirs, or tanks used exclusively for: (a) √ Storage of butane, propane, or liquefied petroleum, or natural gas; (b) No. ≈90 Storage of lubricating oils; (c) No. <u>≈34</u> Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel; (d) No. <u>1</u> Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less; (e) No. ≈10 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less; (10) √ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a

total cooking area of 5 square feet (0.46 square meter) or less;

(11) <u>√</u>	First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation used in support of a manufacturing or production process;
(12)√_	Certain recreational equipment and activities, such as fireplaces, barbecue pits and cookers, fireworks displays, and kerosene fuel use;
(13) <u>√</u>	Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;
(14) <u>√</u>	Laboratory fume hoods and vents;
For the following, at	tach additional pages as necessary:
(15)any other emissions unit at the facility which is not subject to an applicable requirement of the Clean Air Act (list and describe):	
No. <u>1</u>	MSCSC: Carpentry Shop with Cyclone
No. <u>1</u>	MSCSSB: Carpentry Shop Sand Blasting
No. <u>1</u>	MSSK: Solvent-based Parts Cleaners
No. 1	MEYSHOP: Automobile and Mobile Equipment Maintenance Shops

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

Facility Wide

APPLICABLE STANDARDS and LIMITATIONS

◆ **COMAR 26.11.06.08** — Nuisance

"An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be constructed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."

◆ COMAR 26.11.06.09 — Odors

"A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created."

◆ **COMAR 26.11.15.05** –Control Technology Requirements

- "A person who complies with the ambient impact requirement in Regulation .06 of this chapter may not be affected by the amount of the installation's stack height that exceeds good engineering practice (GEP), or by any other dispersion technique.
 - (3) Unless an existing installation is controlled using T-BACT, the degree of emission limitation required in order to demonstrate compliance with Regulation .06 of this chapter may not be affected by the amount of the installation's stack height that exceeds good engineering practice (GEP), or by any other dispersion technique."

◆ COMAR 26.11.15.06 – Ambient Impact Requirement

A. "Except as provided in §B(3) of this regulation, a person may not cause or permit the discharge of a toxic air pollutant listed in COMAR 26.11.16.07 from an existing installation or source if total allowable emissions of that TAP fro the premises will unreasonably endanger human health.

B.A person shall demonstrate compliance with §B(1) of this regulation using the procedures established in Regulation .07 of this chapter and COMAR 26.11.16.

C.A person who owns or operates an existing premises shall meet the requirements of §B(1) and (2) of this regulation for each TAP listed in COMAR 26.11.16.07 by the applicable compliance dates listed in COMAR 26.11.16.07, or not later than 2 years after becoming subject to this chapter, whichever is later."

Emission Unit - Sinter Strand [6-0941]

Operational Standard

(b) The Permittee shall operate two (2) fans per scrubber line: any time that the Sinter production exceeds 9600 tons per day, or when the differential pressure across either of the two scrubber throats is less than 22 inches of water gauge; [Reference MDE PTC 6-0941]

Operational Standards - Record keeping and Reporting

 a. The Permittee shall maintain a written log indicating if daily Sinter production was greater than or less than 9600 tons per day and the number of fans in operation each day. These records shall be kept on site for a period of five (5) years and made available to the Department upon request;

- The Permittee shall continuously record the differential pressure across the two-(2) venturi scrubber throats. The continuous recordings shall be kept on site for a period of twelve (12) months and made available to the Department upon request; and
- c. The Permittee shall keep on site for a period of five (5) years, all continuous differential pressure records from the venturi scrubber for all days when the differential pressure across the venturi scrubber throats is less than 22 inches water gauge.

[Reference: MDE PTC 6-0941]

Emission Units - Coating Lines

For No. 3 Coating Line Roll Coater (Emission Unit CSM3GRC) only

The Permittee shall comply with the T-BACT for this operation that requires the Permittee to operate the dryer below 350 degrees centigrade (662 degrees Fahrenheit), which is the approximate temperature at which the polymers in the coating will decompose. [Reference: MDE PTC 03-6-0948M, Part (C)(2), issued December 20. 1996]

The Permittee shall continuously monitor the temperature of the induction dryer and shall record the temperature to show compliance with Part D(5) [T-BACT for the operation] of the permit. [Reference: MDE PTC 03-6-1732M, Part (E)(4), issued December 20. 1996

Emission Units

Emission Unit PUPB1:Pennwood Boiler No. 1. Installed in 1954. (Registration number 5-0414).

Emission Unit PUPB2:Pennwood Boiler No. 2. Installed in 1957. (Registration number 5-0415).

Emission Unit PUPB3:Pennwood Boiler No. 3. Installed in 1954. (Registration number 5-0414).

Emission Unit PUPB4:Pennwood Boiler No. 3. Installed in 1957. (Registration number 5-0415).

APPLICABLE STANDARDS/LIMITS

- ◆ COMAR 26.11.01.11- Additional CEM Installation Requirements
- A. "Applicability and Exemptions.
 - (1) The provisions of this regulation apply to a person that owns or operates any:
 - (a) Fuel-burning equipment burning coal, residual fuel oil, tars, or waste combustible fluids, and that has a rated heat input capacity of 100 million Btu per hour or greater."
- COMAR 26.11.09.10 Requirements to Burn Used Oil and Waste Combustible Fluid as Fuel.

A.General Requirements.

- (1) A person who proposes to burn used oil or waste combustible fluid in an installation shall submit the following information to the Department:
 - (a) A description of, and the location of, each fuel-burning equipment or other installation in which the used oil or WCF is to be burned and the rated heat input capacity of each;
 - (b) The type and amount of fuel currently being used in each installation and the gallons of used oil or WCF expected to be burned annually;

- (c) The maximum percentage of used oil or WCF to be burned as fuel in each installation; and
- (d) An analysis by an independent laboratory of a representative sample of the used oil or WCF, which shall include the concentration of each of the materials listed in §B of this regulation, the PCB concentration, and the flash point.
- (2) A person may burn on-specification used oil in any installation upon submitting the information required in §A(1) of this regulation.
- (3) A person who is burning used oil or WCF under a current approval issued by the Department may continue to burn the approved material if:
 - (a) The person registers the equipment that is burning the used oil or WCF by submitting the information required in §A(1) of this regulation; and
 - (b)The used oil or WCF is being burned in an authorized installation.
- (4) A person who proposes to burn off-specification used oil or WCF in an installation other than a space heater, as provided in 40 CFR §279.23, is subject to the permit or registration requirements in COMAR 26.11.02.
- (5) A person who receives a permit or registration to burn used oil or WCF shall burn only the materials authorized in the permit or registration.
- (6) A person may burn off-specification used oil and waste combustible fluid only in those installations listed at 40 CFR §279.12(c).

Operational Standards

- a)The Permittee shall not operate the boilers above the following heat input ratings except during periods of maximum emergency generation (meg) as defined by the Pennsylvania, New Jersey and Maryland (PJM) Interconnection L.L.C.:
- (1) Boilers #1 & #2 723 mm Btu/hr;
- (2) Boiler #3 812 mm Btu/hr;
- (3) Boiler #4 1,085 mm Btu/hr.

b)All CEM devices shall be installed, operated and maintained in accordance with COMAR 26.11.01.10, COMAR 26.11.01.11, and Technical Memorandum 90-01, "Continuous Emission Monitoring (CEM) Policies and Procedures," dated October 1990. [Reference: Registration Number 5-0491 & 0492, 5-0414 and 0415]

D. Operational Limits

The Permittee shall maintain a record of training program attendance for each operator on site for at least 5 years and make these records available to the Department upon request.

The Permittee shall submit the Pennwood Boilers CEM data in a format specified by the Department and include:

- (1)a summary page listing the source's excess emissions, CEM and source downtime,
- (2)a detailed listing of periods of non-compliance with a notation indicating the factors that may have contributed to the non-compliance status, and
- (3)results of the daily calibration log as compiled in the CEM data acquisition system.

Emission Unit CRPLPST: Pickling Storage Tanks. Installed in 1999. Modified in 2000. (Registration number 6-2371M).

Emission Unit CRPPLPT: Pickling Tanks. Installed in 1999. Modified in 2000. (Registration number 6-2371M).

♦ Toxic Air Pollutants Requirement which states that the Permittee shall limit HCl emissions from the pickling scrubber to 0.46 pounds per hour, unless the Permittee can demonstrate compliance at a higher emission rate. [Reference Cold Reduction Mill Registration number 6-2371M]